



HIGHLAND COUNTY  
Healthcare  
Collaborative

# Community Health Assessment

**2022**



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

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**Highland County  
Health Department**

**10/26/2022**

## Table of Contents

- I. Acknowledgements
- II. Executive Summary
- III. Purpose and Overview
  - A. Highland County Health Collaborative
  - B. MAPP Process
  - C. Secondary Data
  - D. Primary Data
  - E. Limitations
- IV. 2019 CHIP Progress Report
  - A. 2019 CHA Priorities
  - B. 2019 CHIP Progress and Updates
- V. Data Overview
  - A. 2022 Data Review
  - B. Community Profile
    - i. Community Profile
    - ii. County Health Rankings
    - iii. Demographic Characteristics
    - iv. Age, Sex, Ethnicity, Immigration, Veterans Disability Status
    - v. Housing
    - vi. Education, Employment, Industry, Occupations, Income and Poverty
  - C. Leading Causes of Death
    - i. Leading Causes of Death
    - ii. Premature Death
  - D. Public / Population Health
    - i. Conditions and Diseases
    - ii. Cancer
    - iii. Healthy Behaviors
    - iv. Injury and Violence
  - E. Access to Healthcare
    - i. General Access, Coverage, and Affordability
  - F. Physical Environment
    - i. Air, Water, and Toxic Substances
    - ii. Crime
  - G. Sub-Population – Special Focus
    - i. Tobacco Users
    - ii. Low Income Households and Self-Reported Health Status
- VI. Community Health Assessment Survey Results
- VII. Community Themes and Strengths Assessment Results
- VIII. Forces of Change Assessment Results
- IX. Public Health System Assessment Results
- X. Conclusions and Next Steps

# **I. Acknowledgements**

The Highland County Health Collaborative's 2022 Community Health Assessment (CHA) is the result of a collaboration between local agencies, volunteers and consultants, all dedicated to improving the health and quality of life of its community members. In addition, the support and engagement of the Highland County community in participating in interviews and providing input during the survey and public comment process was invaluable for this assessment.

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

## **Authors**

Jared Warner, MEM, REHS  
Hannah Guilkey-Humphrey, BS  
S. Kimberly Jones, MAS, GPC, Adena Health System

## **Secondary Data Collection**

## **Survey Processing**

Robert Speakman

## II. 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 on top health needs and priorities to drive effective planning that results in positive change. Evidence based practice indicates 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.



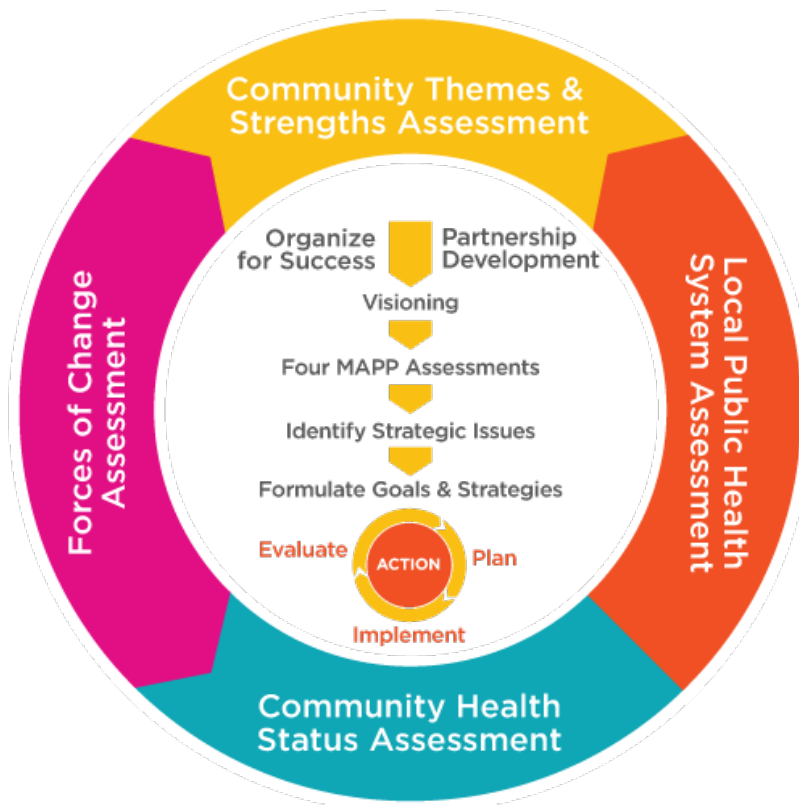
### How was the CHA developed?

For the 2022 assessment, the Highland County Health Collaborative utilized the CDC and NACCHO's Mobilizing Action through Planning and Partnership (MAPP) strategy. MAPP is a six-phase process that guides the assessment of the community's health needs and development of a community health improvement plan (CHIP). The assessment portion of this 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 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.

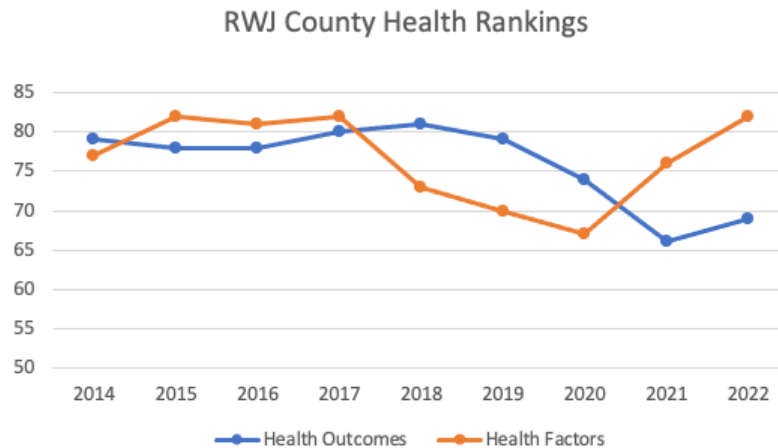


***MAPP Four-Part Comprehensive Assessment Process***

## Key Findings

The 2022 CHA process included review of the assessments completed in 2022, as well as current Robert Woods Johnson (RWJ) County Health Rankings to outline any trends impacting public health. Health outcomes and health factors for Highland County continue to be in the lowest quartile of the state in 2022. In a reversal from recent trends, the health factors ranking for Highland County dropped to 82. Health outcomes increased to number 69 out of 88 counties, continuing a significant improvement in health outcomes over the past 2 years.

	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



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 these assessments form an important foundation for the CHA document, and provide input into many public health system planning efforts.

In addition to directly collected primary survey data, secondary data for Highland County was collected by Healthcare Coalition of Northern Ohio. This 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 that the Ohio average. Childhood poverty rates also continue to be at rates significantly higher than state averages.

Adult smoking rates continue to be significantly higher than states averages. This sub-group of Highland County CHA survey responses will be reviewed in more detail later in this report.

After the primary and secondary data was collected and summarized from each of the four assessment categories, the results were then analyzed to identify the opportunities to improve the health of Highland County. This information and analysis form the remainder of this CHA report. This CHA data will be used during the development of the Highland County Community Health Improvement Plan.

### **III. 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 or not 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 then using that 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 it via high rates of absenteeism and higher health insurance costs. Whole communities can suffer economic loss when groups of citizens are ill. As a result, everyone benefits from addressing social, environmental, economic, and behavioral determinants of health.

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 views from community members is one of the most important aspects of the community health needs assessment. This involves surveying a percentage of the community to determine which health problems are most prevalent and to solicit their ideas concerning strategies to address these problems. It also explores the factors that impact the design of programs and services to effectively address the identified health problems on a broader scope.

In addition to collecting specific and direct population health data, surveys are also conducted to identify some of the forces of change, community strengths, community weaknesses, and other factors that indirectly influence health outcomes.

## Highland County Health Collaborative

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

Corner Pharmacy  
Community members  
Highland County Probation Department  
Adena Healthcare System  
Highland County Community Action  
Highland County Chamber of Commerce  
Highland County Emergency Management Agency  
Highland District Hospital  
Paint Valley ADAMH  
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). This 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. This data will be used to develop the community health strategic plan.



## Mobilizing Action for Planning and Partnership

### 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 only Highland County. Both qualitative and quantitative data were collected from primary and secondary sources. Data was collected in a total of four categories (Figure 1): Community Themes and Strengths; Local Public Health System; Community Health Status; and Forces of Community Change. The published assessment completed as part of these efforts is intended to inform decision makers and funders about the challenges Highland County faces in improving community health, and the priority areas where support is most needed. The information is also intended to be useful as a planning tool for community organizations.

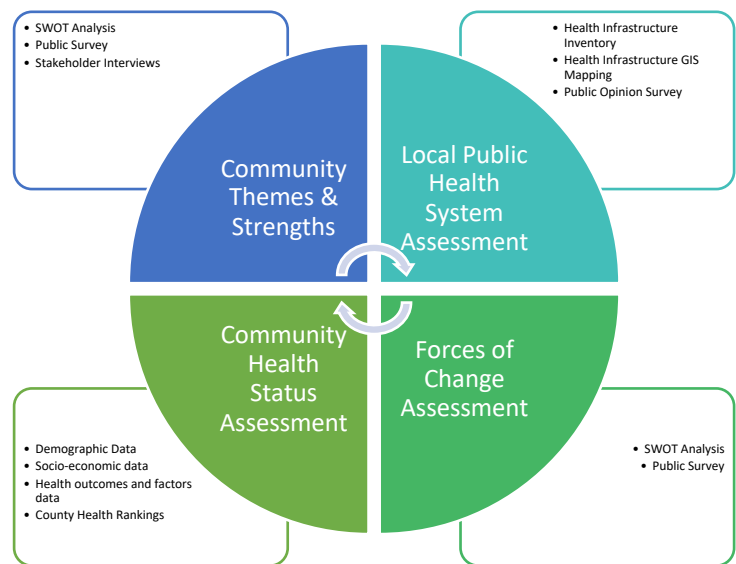


Figure x: MAPP Four-Part Comprehensive Assessment Process

### Methods

Quantitative and qualitative methods were used to collect information for this 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 into the issues experienced by the population. Data includes opinions expressed from a widely distributed community health survey - which received 524 responses.

### Source

Primary and secondary data sources were used as part of the needs assessment and came from both internal and external sources. Internal data came from within the health system/hospital (patient population data) and external 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. An example of this would be 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. An example of this would be rates of childhood obesity.

## **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). These 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 then mapped utilizing GIS technology to create a visual on health resource gaps in the community. This 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 - from 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**

Primary methods used in the assessment process for collecting input from the community was a community survey.

### ***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 in Highland County where the groups of interest would best be reached. These 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 Monkey. Notices about the online version with its link were posted on member agency's websites, social media pages, local media outlet pages, published via social media 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 these survey results to drive future health department activities.

For the 2022 CHA Survey, limitations include the following:

- 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 in understanding survey questions.
- Potential oversampling of health department clients could occur due to increased exposure to social media outreach.
- Limited ability (self-reported) to verify that survey responses were provided from actual Highland County residents.

#### **IV. 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 health issues in the Highland County community. This included improving systems, creating collaborations and seeking 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 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 of 2019, the Highland County Health Collaborative finalized the priorities for the CHIP. The Highland County General Health District was instrumental during this process and county priorities were aligned with the State Health Improvement Plan (SHIP). These priorities were also based upon the survey that Highland County residents completed as part of the Community Health Assessment. The SHIP priorities consisted of the following: mental health and substance abuse, chronic disease, and maternal and infant health.

After deciding to align 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

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

Highland County Community Health Improvement Plan Action Plan				
<b>Priority Area:</b> Illegal Substance Abuse				
<b>Goal:</b> Reduce unintentional overdose deaths in Highland County to less than 17 per 100,000 (less than 8 overdose deaths per year) by January 1, 2019.				
Objective	Action Step (Activities)	Timeline	Performance Indicator	Progress to Date
<b>Objective 1.1: Reduce unintentional drug overdose deaths.</b>	Distribute at least 200 naloxone kits in Highland County in 2018.	January 1, 2018 to December 31, 2018.	Health department maintains inventory of naloxone distributed.	<p>11/2019: Over 200 naloxone kits have been distributed to members of the Highland County Community at over 25 separate events.</p> <p>Highland County Sheriff, Hillsboro Police Department, Lynchburg Police Department, and Leesburg Police Department are now carrying naloxone kits.</p> <p>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>
	Support the implementation of a quick opioid overdose response team.	Implementation by January 1, 2018	<p>Process established and put into place.</p> <p>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 this 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>

	Increase the number of prescription medication drop boxes in Highland County.	July 1, 2019	Development of agreements for drop box placement. Drop boxes installed and regular pick up scheduled.	<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>
<b>Objective 1.2: Inform the public about drug issues, available resources in the community, and other drug prevention information.</b>	Develop and distribute drug abuse prevention educational information utilizing various forms of media.	Ongoing. Annual media program in October during Red Ribbon Week.	Release of articles, program information	<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. COVID-19 response efforts temporarily halted this and many other education programs, but these programs have since been restarted.</p>
	Increase community awareness of available resources for drug prevention education, drug drop box options, and other resources available to the community.	Ongoing. Annual media program in October during Red Ribbon Week.	Release of articles, program information	<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. COVID-19 response efforts temporarily halted this and many</p>

				other education programs, but these programs have since been restarted.
	Review the education and support process in place between Highland District Hospital, Help Me Grow, Women Infants and Children Program, and other resources.	January 1, 2019	Report of progress to Child Fatality Review Board in February, 2019	11/2019: The health department facilitated discussions between HDH, Adena, WIC, HMG, and other agencies during the 2018 Child Fatality Review process in order to ensure coordination between these key agencies.  10/2022: This coordination effort was discussed again at the 2019, 2021, and 2022 Child Fatality Review process. Efforts continue to coordinate and support education efforts of these agencies.
	Provide drug abuse prevention information to healthcare providers in the county.	December 31, 2018	Materials sent to local healthcare providers.  Materials posted on Highland County Health Department website.	11/2019: The health department provided information to healthcare providers on several different occasions, most recently related to vaping injury reports.  10/2022: Limited activity has occurred in this area due to the COVID-19 response of the past several years.
	Support community events that increase awareness and education regarding substance abuse.	July 1, 2019	As they occur. Hope for Highland, other nonprofits regularly host events.	11/2019: Since January, 2018, the health department has attended more than 25 community events related to drug abuse prevention.  10/2022: Limited activity has occurred in this area due to the COVID-19 response of the past several years.
<b>Objective 1.3: Expand local stabilization, treatment, and recovery support options for</b>	Pursue funding options for additional medication assisted treatment options.	Ongoing	Monthly review at Drug Abuse Prevention Coalition	11/2019: FRS and ADAMH Board have both developed additional treatment programs in Highland County.



Highland County residents.				10/2022: Additional treatment options and facilities have been opened in Highland County, including additional residential locations.
	Investigate the potential to increase access to Vivitrol.	Ongoing	Monthly review at Drug Abuse Prevention Coalition	11/2019: FRS has increased vivitrol access to the community.  10/2022: FRS continues to provide vivitrol access.
<b>Highland County Community Health Improvement Plan Action Plan</b>				
<b>Priority Area:</b> Illegal Substance Abuse				
<b>Goal:</b> By January, 2019, decrease the number of new Hepatitis C infections by 10% (less than 100 new cases per year).				
<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 from 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 on this effort.	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 on this topic.

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

## Highland County Community Health Improvement Plan Action Plan

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

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

Objective	Action Step (Activities)	Timeline	Performance Indicator	Progress To Date
<b>Objective 1.1: Increase access to healthy cooking classes</b>	Promote existing health cooking / healthy eating classes and educational programs. 12/6/2018 Update: Completed. OSU continues to promote healthy eating classes.	Ongoing	Ongoing	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 their obesity reporting mechanisms, and now show Highland County as having a 41% obesity rate. This measure should be revisited in the next CHIP process.
	Investigate funding opportunities for healthy eating education efforts	Ongoing	Ongoing	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.
<b>Objective 1.2: Encourage the development and implementation of workplace wellness programs</b>	Promote the development of workplace wellness programs in government agencies	July 1, 2019	Formal promotion of workplace wellness plan presented to government partners	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.
	Promote the development of workplace wellness programs in private business	July 1, 2019	Formal promotion of workplace wellness plan presented to government partners	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.

<b>Objective 1.3: Investigate the development of community gardens and other community based efforts to promote healthy food options.</b>	Work with Highland County cities and villages to discuss the possibility of creating community gardens and promoting health eating.	January 1, 2019	Meetings conducted with Greenfield, Hillsboro, and Paint Township	<p>11/2019: Creating Healthy Communities Grant applied for by HCHD. Other funding opportunities sought to fund these efforts.</p> <p>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				
<b>Priority Area:</b> Chronic Disease				
<b>Goal:</b> Decrease 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
<b>Objective 1.1: Increase the availability and utilization of breast cancer screenings.</b>	Work with local healthcare providers to provide education on the importance of mammograms and to increase access to free or low-cost mammograms.	January 1, 2018	Meeting occurs to investigate expansion of existing program.	<p>11/2019: HCHD has partnered with HDH to offer mammograms on multiple occasions in a community partnership.</p> <p>10/2022: Highland District Hospital has shifted their overall approach to mammograms and now offers regular free access to mammograms at their facility.</p>

## Highland County Community Health Improvement Plan Action Plan

**Priority Area:** Chronic Disease

**Goal:** Decrease 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.

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.	<p>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.</p> <p>10/2022: HCHD continues to provide no cost preventative health screenings to the community.</p>

## Highland County Community Health Improvement Plan Action Plan

### Priority Area: Chronic Disease

**Goal:** Decrease 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
<b>Objective 3.1: Increase the rates of physical activity in Highland County.</b>	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.
	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.
<b>Objective 3.2: Increase the rates of heart health screenings and opportunities for the public.</b>	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.
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Highland County Community Health Improvement Plan Action Plan				
<b>Priority Area:</b> Chronic Disease				
<b>Goal:</b> Decrease the overall rate of diabetes prevalence to below 11% (4,730 people in Highland County) by July 1, 2019.				
Objective	Action Step (Activities)	Timeline	Performance Indicator	Progress To Date
<b>Objective 4.1: Provide educational and health promotion information for diabetes prevention and management.</b>	Work with community partners to sponsor educational events related to diabetes prevention and disease management.	January 1, 2019	Meeting occurs to investigate possibilities for partnerships.	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.
	Promote healthy eating as a method for diabetes prevention.	January 1, 2019	Meeting occurs to investigate possibilities for partnerships.	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.



## Highland County Community Health Improvement Plan Action Plan

### Priority Area: Infant Mortality

**Goal:** Decrease 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
<b>Objective 1.1: Increase community education and information related to safe sleep practices, postpartum depression, child supervision, and other safety issues.</b>	Promote safe sleep via social media, traditional media, and in community presentations and events.	April 1, 2018	Release infant mortality media information	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 their local OB surgery and delivery services, which may impact our local ability to reach mothers with this important information.
	Support community events and activities that promote safe sleep education, postpartum depression, child supervision, and other safety issues.	Ongoing	Ongoing	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 their local OB surgery and delivery services, which may impact our local ability to reach mothers with this important information.
	Improve the coordination between Highland District Hospital and Help Me Grow, Women, Infant, and Children's Health program, and other prenatal education and infant education providers.	April 1, 2018	Meeting conducted to evaluate coordination of programs	11/2019: The health department facilitated discussions between HDH, Adena, WIC, HMG, and other agencies during the 2018 Child Fatality Review process in

				order to ensure coordination between these key agencies.  10/2022: Completed
<b>Objective 1.2: Increase community access to safe sleep resources.</b>	Promote the availability of Cribs for Kids, Safe Sleep Boxes, and other safe bedding options for infants.	April 1, 2018	Release infant mortality media information	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 information on cribs for kids and other local programs. Highland District Hospital recently closed their local OB surgery and delivery services, which may impact our local ability to reach mothers with this important information.
	Investigate other funding opportunities and options for providing safe sleep resources to local parents.	Ongoing	Ongoing	11/2019: Additional work is needed in this area, no progress to date.  10/2022: No significant progress made on this to date.

## Highland County Community Health Improvement Plan Action Plan

### Priority Area: Tobacco Use

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

Objective	Action Step (Activities)	Timeline	Performance Indicator	Progress To Date
<b>Objective 1.1: 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 education.	April 1, 2019	Release of tobacco prevention media information	<p>11/2019: Health department has conducted multiple tobacco prevention campaigns with community children, including a program in 2017 and 2018, where 800 students received education. In 2019, over 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.</p> <p>12/6/2018 Update: Completed</p>	April 1, 2019	Release of tobacco prevention media information	<p>11/2019: Health department has conducted multiple tobacco prevention campaigns with community children, including a program in 2017 and 2018, where 800 students received education. In 2019, over 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: Decrease the overall rate of student annual tobacco use from 28.2% to 25% by July 1, 2019.

Objective	Action Step (Activities)	Timeline	Performance Indicator	Progress To Date
<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, where 800 students received education. In 2019, over 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 that is targeted at 7th-12th Grade.  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 program in 2017 and 2018, where 800 students received education. In 2019, over 300 students received vaping and

				<p>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>	July 1, 2019	Formal implementation of elementary programs	<p>11/2019: Health department has conducted multiple tobacco prevention campaigns with community children, including a program in 2017 and 2018, where 800 students received education. In 2019, over 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>	January 1, 2018	Correspondence sent to local legislative members	<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>

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## V. 2022 Data Review

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

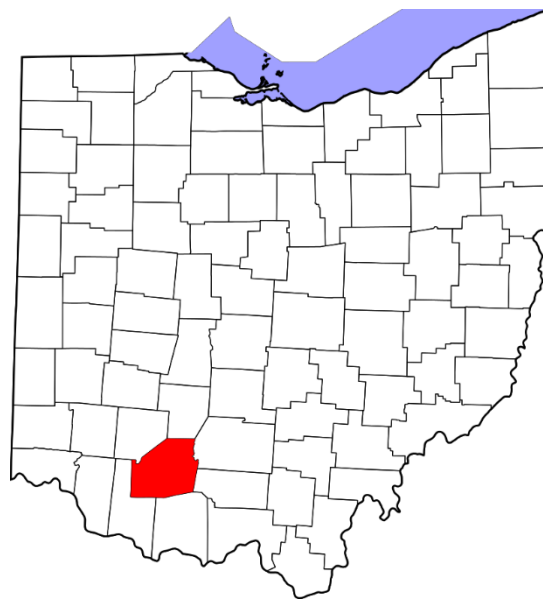
Qualitative data included surveys, key stakeholder interviews and public comment. 524 surveys were collected from the general public. Internet and social media sites were utilized to post the survey and public comment information. Both electronic and paper copies of the surveys were collected at local 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. These sources included 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 on tobacco use, tobacco use and poverty, and poverty impact on health outcomes, was conducted using CHA collected survey data.

### Community Profile: Highland County, Ohio

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

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



Community Resource List for 2022 can be found at the following link:

<https://hccao.org/wp-content/uploads/2022/07/2022-HC-Community-Resource-Directory-.pdf>

The population of Highland County is 43,317 (U.S. Census Bureau 2020). It is part of the 2<sup>nd</sup> Congressional District and contains the population patterns and distinct economic conditions inherent of the Appalachian region of the U.S. These include challenges such as low educational attainment, limited economic diversification and growth.

Poverty levels are considerably high in the region 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 approximately only 13.8% having a four-year college degree or higher.

### 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%

## County Health Rankings

The economic and educational challenges experienced in Highland County and the surrounding region have been correlated to declining health. Many Appalachian Ohio counties, including Highland County, 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 health outcomes and factors impacting health of Highland County residents.

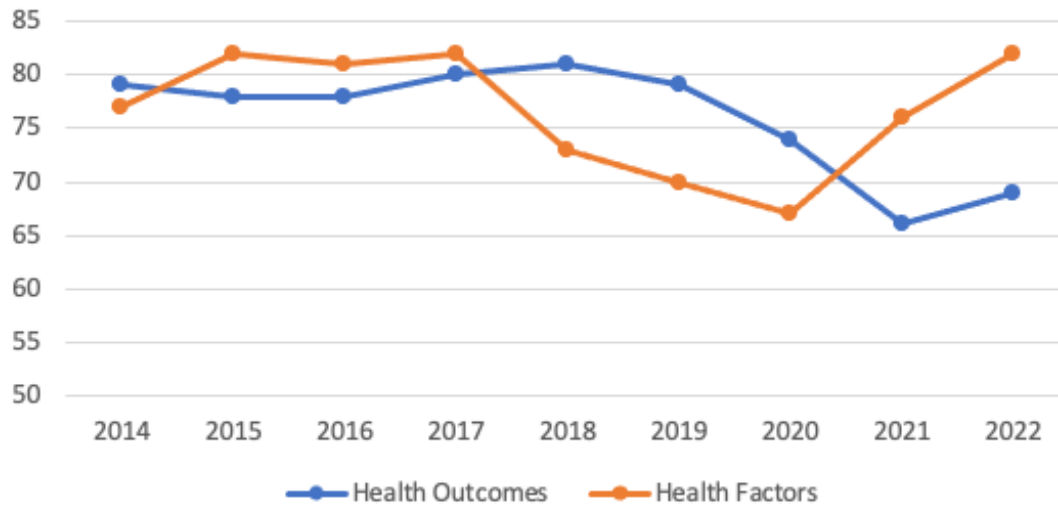
In overall positive health outcomes, the State of Ohio ranked low nationally. All 88 counties in Ohio were then ranked both related to health outcomes and health factors. Rates of death from heart disease, lung cancer, and pulmonary-respiratory disease are all above state and national averages. Highland County is currently ranked 69<sup>th</sup> out of 88 counties for health outcomes and 82<sup>nd</sup> for health factors.

Highland County has stayed relatively the same over the last several years in terms of health outcomes and health factors and haven't shown significant improvement. Access to healthcare has improved. Socio-economic conditions such as employment and educational attainment have also improved slightly, as have health behaviors. All of which have 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 improving social support, mental health and health behaviors like 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



### Highland (HG)



#### Health Outcomes

Highland (HG) is ranked among the least healthy counties in Ohio (Lowest 0%-25%)



#### Health Factors




Highland (HG) is ranked among the least healthy counties in Ohio (Lowest 0%-25%)

## Health Outcomes

### Length of Life

Premature death	 9,700		8,600-10,800	5,600	8,700
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### Quality of Life

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	4.0	5.2
Low birthweight	8%	7-8%	6%	9%


### Additional Health Outcomes (not included in overall ranking) +

## Health Factors




### Health Behaviors

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	


## Clinical Care

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	<b>44%</b>			55%	51%

## Social & Economic Factors

High school completion	84%		82-86%	94%	91%
Some college	44%		39-49%	74%	66%
Unemployment	8.7%			4.0%	8.1%
Children in poverty	<b>22%</b>		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

## Physical Environment

Air pollution - particulate matter	8.9			5.9	9.0
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%

## 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 is understood that this 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. This is approximately 1% decline since 2010. This is less growth than what is currently seen in Ohio as a whole and across 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 1%. In addition, 14% of the population has a disability.

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%

*U.S. Census Bureau; 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. This is also true for the percentage of households with children under the age of 18 years. Nearly three quarters of the population (73%) of Highland County resides in a rural area. This 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.

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%

*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%

*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 and how it compares with the rest of Ohio and the U.S.

<b>Education</b>	
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%
<b>Health</b>	
With a disability, under age 65 years, percent, 2016-2020	14.0%
Persons without health insurance, under age 65 years, percent	10.3%
<b>Economy</b>	
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
<b>Transportation</b>	
Mean travel time to work (minutes), workers age 16 years+, 2016-2020	28.8
<b>Income &amp; Poverty</b>	
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%

*U.S. Census Bureau 2020 Census*

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%

Industrial Sector	Estimated Employment	%
<b>Total Civilian Employed Population (16 years and over)</b>	<b>30,904</b>	<b>100.0%</b>
Educational services, and health care and social assistance	4,647	25.2
Manufacturing	3,689	20.0
Retail trade	1,817	9.8
Transportation and warehousing, and utilities	1,586	8.6
Construction	1,309	7.1
Professional, scientific, and management, and administrative and waste management services	1,247	6.8
Arts, entertainment, and recreation, and accommodation and food services	1,118	6.1
Other services, except public administration	904	4.9
Agriculture, forestry, fishing and hunting, and mining	744	4.0
Finance and insurance, and real estate and rental and leasing	482	2.6
Public administration	409	2.2
Wholesale trade	321	1.7
Information	182	1.0

*U.S. Census Bureau; 2016-2020 American Community Survey Estimates (Table DP03)*

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

## 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 what health risk factors are most prevalent among a population. The life expectancy of a Highland County resident is 74.8 years of age which is lower than the average age of an Ohioan (77 years of age) or those that live in some of the U.S.'s healthiest communities (81 years of age). Figure x provides a breakout of life expectancy by census tract for Highland County and demonstrates disparity for those living in those areas.

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

Cause of Death (Crude rate per 100,000 population)	Highland County 2019 (crude rate per 100,000 population)	Highland County 2022 (crude rate per 100,000 population)
Cancer	237.2	268.1
Heart Disease	296.5	260.0
Chronic Lower Respiratory Diseases	110.5	87.1
Unintentional Injury	60.5	65.0
Stroke	62.8	61.5
Alzheimer's Disease	N/A	53.4
Diabetes	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



## 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 these factors are much higher than state and national statistics.

Highland County Comparison Suicide Deaths by Method

Suicide Deaths by Method (Age-Adjusted Rate per 100,000 population)	Highland County 2022 <sub>1</sub>	Ohio 2022 <sub>1</sub>	U.S. 2022 <sub>2</sub>
Firearm	8.4	7.5	6.8
Hanging, Suffocation, or Strangulation	--*	4.3	4.0
Poisoning	--*	1.9	1.9
Jumping From a High Place	--*	0.3	0.3
Other	--*	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

Highland County Comparison Suicide Rates by Demographic

Suicide Deaths by Demographics (Age-Adjusted Rate per 100,000 population)	Highland County 2022 <sub>1</sub>	Ohio 2022 <sub>1</sub>	U.S. 2022 <sub>2</sub>
Female	--*	5.9	6.1
Male	27.6	24.0	22.0
14 and younger	0.0	1.1	1.2
15-24	19.4	14.6	13.7
25-34	32.8	19.1	17.0
35-44	27.4	20.4	17.7
45-54	10.4	20.4	19.9
55-64	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

#### Highland County Infant and Child Mortality Rates

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

## 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 indicate what health behaviors are 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 18:** 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 Blood 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 19:** Highland County, Ohio Asthma and Chronic Obstructive Pulmonary Disease (COPD)

<b>Illness and Disease</b>	<b>Highland County 2019*</b>	<b>Highland County 2022<sub>1</sub></b>	<b>Ohio 2022<sub>2</sub></b>	<b>U.S. 2022<sub>2</sub></b>
<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 had 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, breast cancer, lung and colon cancer 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 20:** Highland County, Ohio Age-Adjusted Cancer Mortality Rates per 100,000 population

<b>Forms of Cancer</b>	<b>Highland County 2019*</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>Lung Cancer</b>	48.1	56.1	45.0	36.7

<b>Colon and Rectum</b>	--*	18.4	14.8	13.4
<b>Prostate</b>	--*	17.8	19.4	18.8
<b>Breast Cancer</b>	--*	14.9	12.0	11.0
<b>Ovarian</b>	N/A	6.1	6.5	6.5
<b>Oral Cavity &amp; Pharynx</b>	N/A	--*	2.8	2.5
<b>Larynx</b>	N/A	--*	1.2	0.9
<b>Testicular</b>	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 21:** Highland County, Ohio Age-Adjusted Cancer Incidence Rates per 100,000 population

<b>Forms of Cancer</b>	<b>Highland County 2019*</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>Prostate</b>	82.5	110.7	112.5	106.2
<b>Lung Cancer</b>	73.6	78.6	66.7	57.3
<b>Breast Cancer</b>	113.3	61.0	69.9	67.7
<b>Colon and Rectum</b>	48.7	49.9	40.5	38.0
<b>Oral Cavity &amp; Pharynx</b>	12.4	16.0	12.5	11.9
<b>Cervical</b>	13.2	10.1	7.9	7.7
<b>Brain</b>	6.6	8.9	7.1	6.5
<b>Ovarian</b>	6.6	8.8	10.0	10.7
<b>Testicular</b>	5.0	7.2	5.8	5.7
<b>Esophagus</b>	4.3	6.4	5.6	4.5
<b>Larynx</b>	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 22: 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 23: 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 3 <sup>rd</sup> 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 24:** Highland County, Ohio Child Health

Child Health	Highland County 2019*	Highland County 2022	Ohio 2022	U.S. 2022
<b>Children lead screened</b> (under age 6)	1.6%	333	143,705	N/A
<b>Percentage of those with confirmed elevated blood levels</b> ( $\geq 5\mu\text{g/dL}$ ) (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 enough 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 25:** Highland County, Ohio Adult Health Behaviors

Health Behaviors	Highland County 2019*	Highland County 2022	Ohio 2022	U.S. 2022
<b>Physical Inactivity</b> (did not participate in any physical activities in past month)	28.2%	34.3% <sub>1</sub>	27.6% <sub>1</sub>	26.3% <sub>2</sub>
<b>Fruit Consumption</b> (less than one time per day)	N/A	N/A	42.7% <sub>2</sub>	39.3% <sub>2</sub>
<b>Vegetable Consumption</b> (less than one time per day)	N/A	N/A	20.2% <sub>2</sub>	20.3% <sub>2</sub>
<b>Current Drinkers</b> (had at least one drink of alcohol within the past 30 days)	N/A	N/A	50.8% <sub>3</sub>	52.9% <sub>3</sub>
<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% <sub>1</sub>	20.7% <sub>1</sub>	16.8% <sub>2</sub>
<b>Current Smokers</b>	21.9%	28.5% <sub>1</sub>	21.8% <sub>1</sub>	16.0% <sub>2</sub>
<b>Current E-Cigarette Users</b>	N/A	N/A	5.4% <sub>4</sub>	5.6% <sub>4</sub>

*\*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*

## Injury and Violence

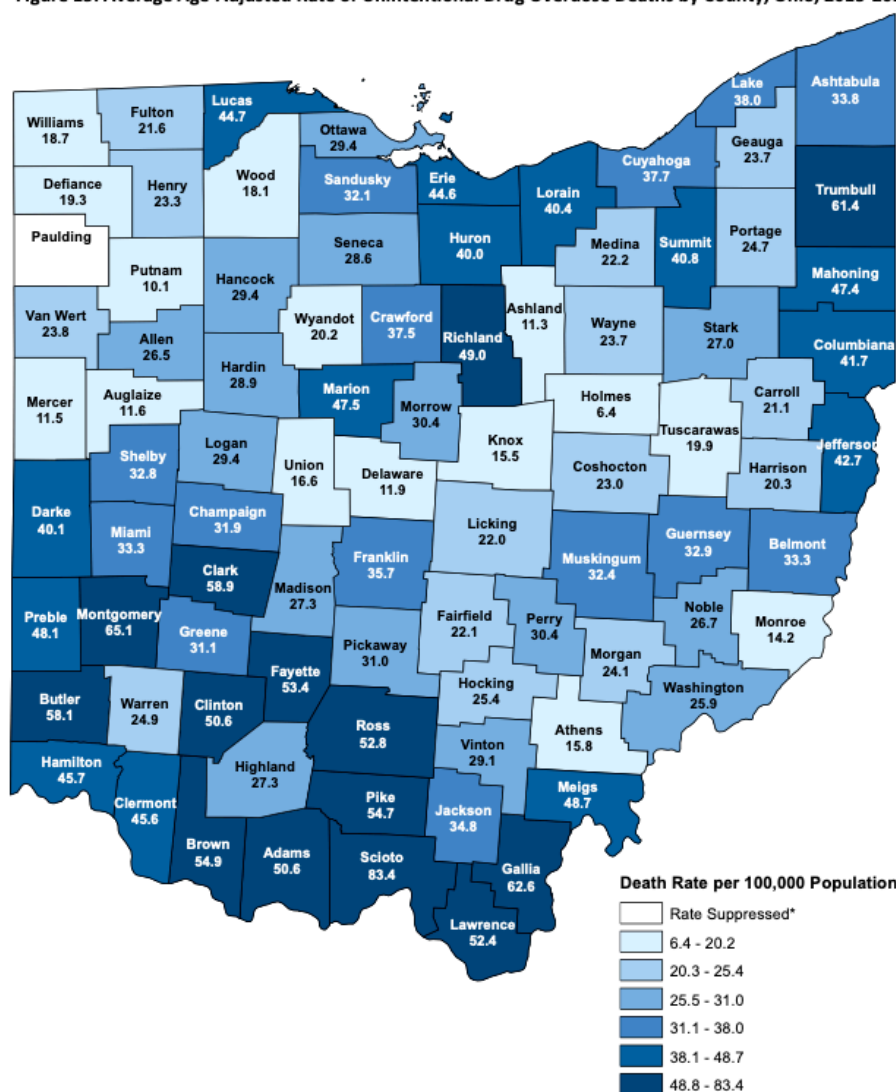
Accidental death is a leading cause of death in Highland County. Closer review reveals drug overdoses and traffic fatalities being the majority of those deaths. Local data is collected through the Highland County Coroner's Office, Highland County General Health District and the local State Highway Patrol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

## Drug Overdose Deaths

Drug overdose deaths continue to be a leading accidental death cause in Highland County Ohio, although community-wide deployment of Narcan has decreased deaths. Highland County ranked among the lowest 20% of counties with overdose deaths between 2015 and 2020.

### Demographics: County

Figure 15. Average Age-Adjusted Rate of Unintentional Drug Overdose Deaths by County, Ohio, 2015-2020



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 unintentional 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.



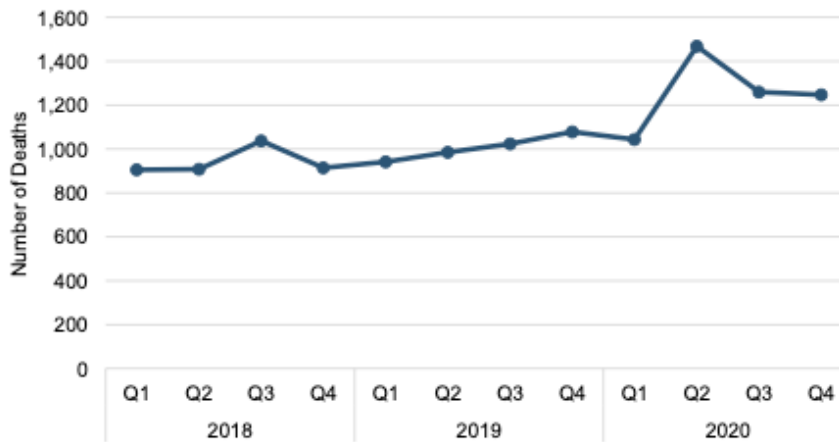
## Demographics: County

**Table 4. 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>
Ohio	1,772	1,914	2,110	2,531	3,050	4,050	4,854	3,764	4,028	5,017	45.6	37.4	
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.

**Figure 2. 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 unintentional drug poisoning (underlying cause of death International Classification of Diseases, Tenth Revision [ICD-10], codes X40-X44).

## 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 4 fatality accidents in 2021.

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 (ACEs)

Adverse Childhood Experiences have been shown to be a strong indicator for other mental health, behavioral health, and physical health risks. The HCHD CHA survey collected ACEs 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>

## 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). This is due to the limited number of providers, those who access healthcare with Medicaid and the geographic isolation experienced in 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 29:** 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 FQHC's (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. Over 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>

## Physical Environment

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

### Air Quality

Ambient air quality monitoring is currently not established in Highland County, Ohio, and therefore not available for review as part of the 2019 Community Health Needs Assessment. Some toxics release inventory emissions inventory (TRI) is available from the EPA to provide some insight into what 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 30:** 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 that Drives 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 31:** 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*

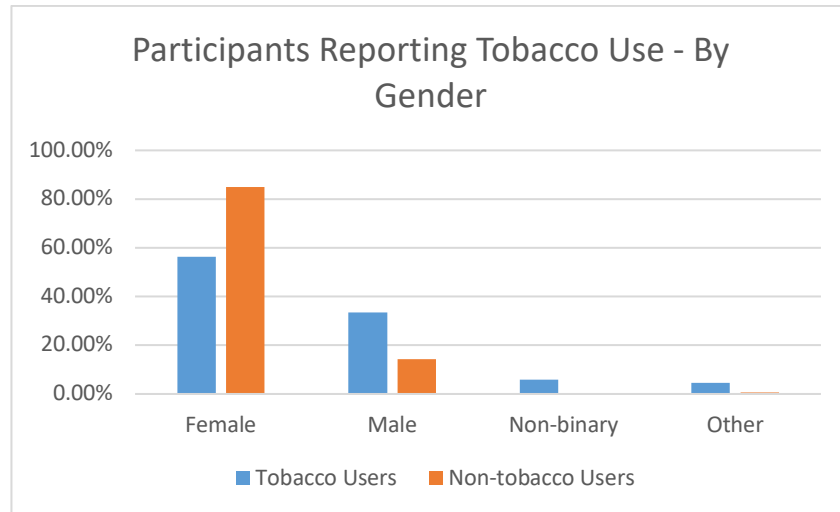
## **Sub-Population: Special Focus**

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, disease, and pre-mature death. Poverty is another significant health issue for Highland County, and leads to many health barriers and poor health outcomes for Highland County residents.

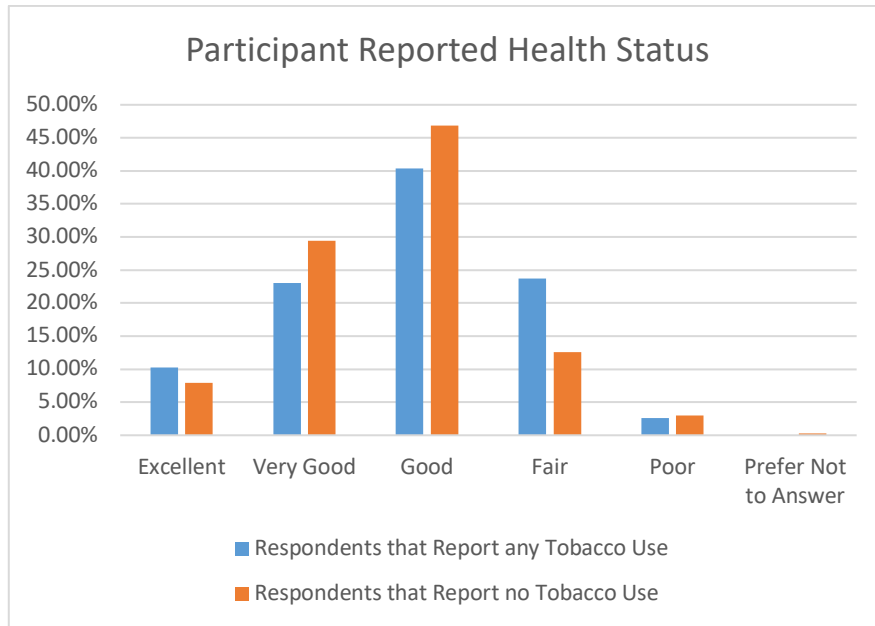
## **Tobacco Users**

Tobacco users rated their own personal health condition worse than non-tobacco users that completed the 2022 CHA. Tobacco users also reported less income per household than non-tobacco users. These factors can have significant impacts on personal health.

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

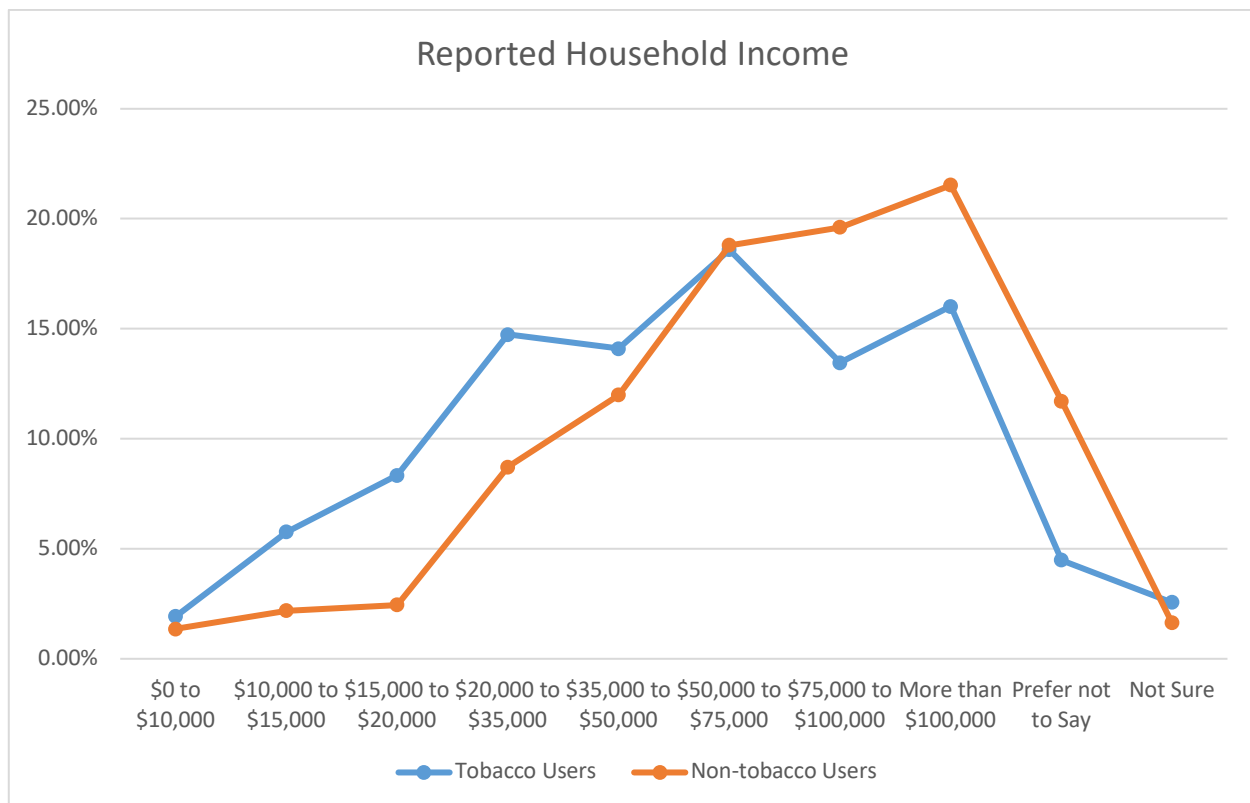


Would you say that in general your health is - Excellent, Very Good, Good, Fair, Poor, Prefer Not to Answer		
General Health Rating	Respondents that Report any Tobacco Use	Respondents that Report no Tobacco Use
Excellent	10.26%	7.90%
Very Good	23.08%	29.43%
Good	40.38%	46.87%
Fair	23.72%	12.53%
Poor	2.56%	3.00%
Prefer Not to Answer		0.27%



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%





## Low Income Households and Self-Reported Health Status

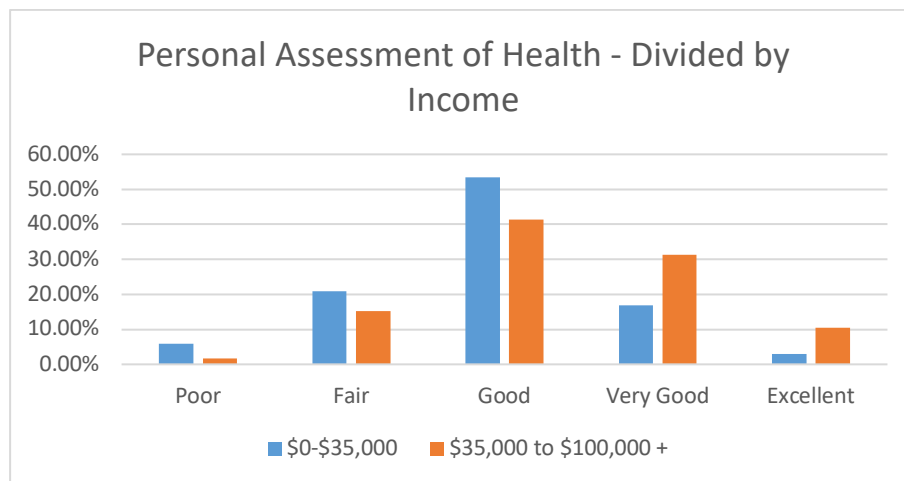
Poverty is a significant indicator of health in Highland County, and a long-standing barrier to access to care, transportation, utilization of healthcare resources, and other health outcome factors. The 2022 CHA survey further supported this connection between health and wealth, with health outcomes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

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

**2021 POVERTY GUIDELINES FOR THE 48 CONTIGUOUS STATES AND THE DISTRICT OF COLUMBIA**

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.	

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%



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

## VI. Community Health Assessment Survey Results

Multiple methods of community input were sought for this community health assessment to inform the process. It is 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 into a variety of factors that may be impacting the health of the community, as well as to ask for feedback about what the community needs to improve overall health. In addition to asking general questions regarding demographics, education, income and social factors, additional questions regarding environmental factors, health behaviors, and top community health needs are also asked.

The survey was made available for over 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:** 525

**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% 4 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

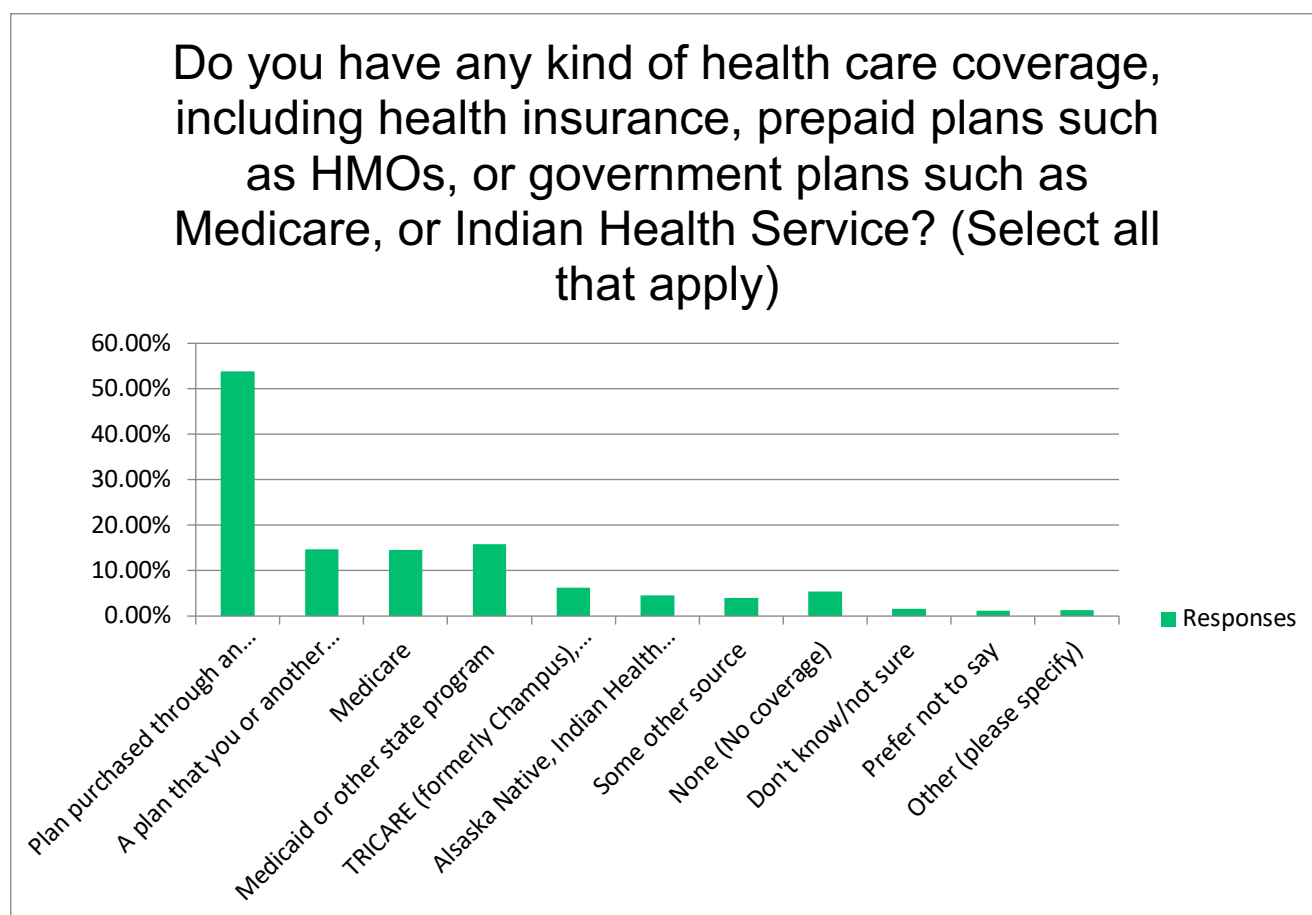
**Marital Status:** 10.69% divorced; 64.69% married; 6.11% widowed; 1.72% separated, 9.92% never married

**Employment Status:** 68% employed; 4% self-employed; 3% unemployed; 6% homemaker; 4% disabled; 12% retired.

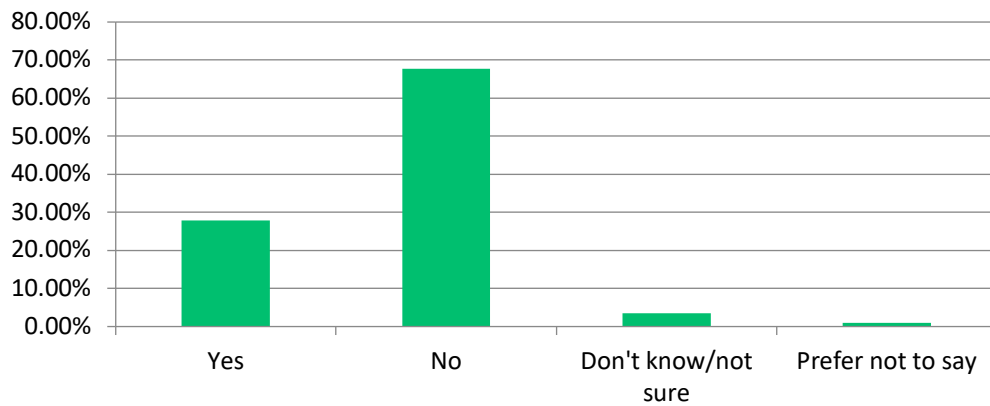
## Environmental Factors

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

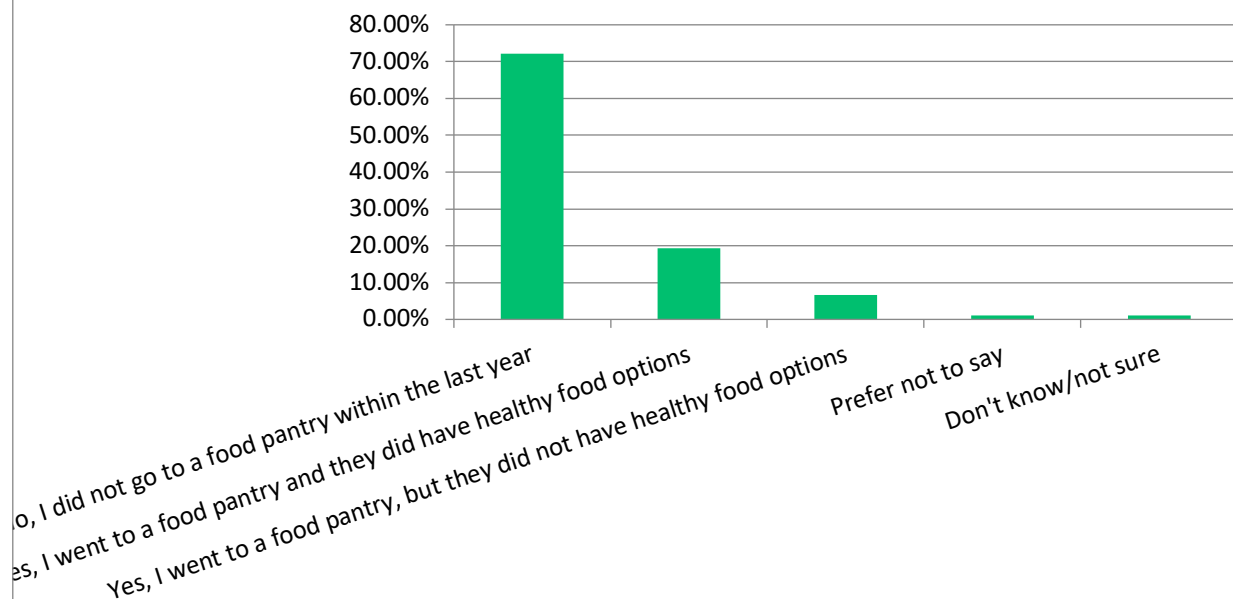
The most significant findings for environmental issues in Highland County from the public survey included access to healthcare, including socio-economic barriers like transportation that may impact ability to access services. Those reporting barriers to healthcare in the Highland County community indicated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

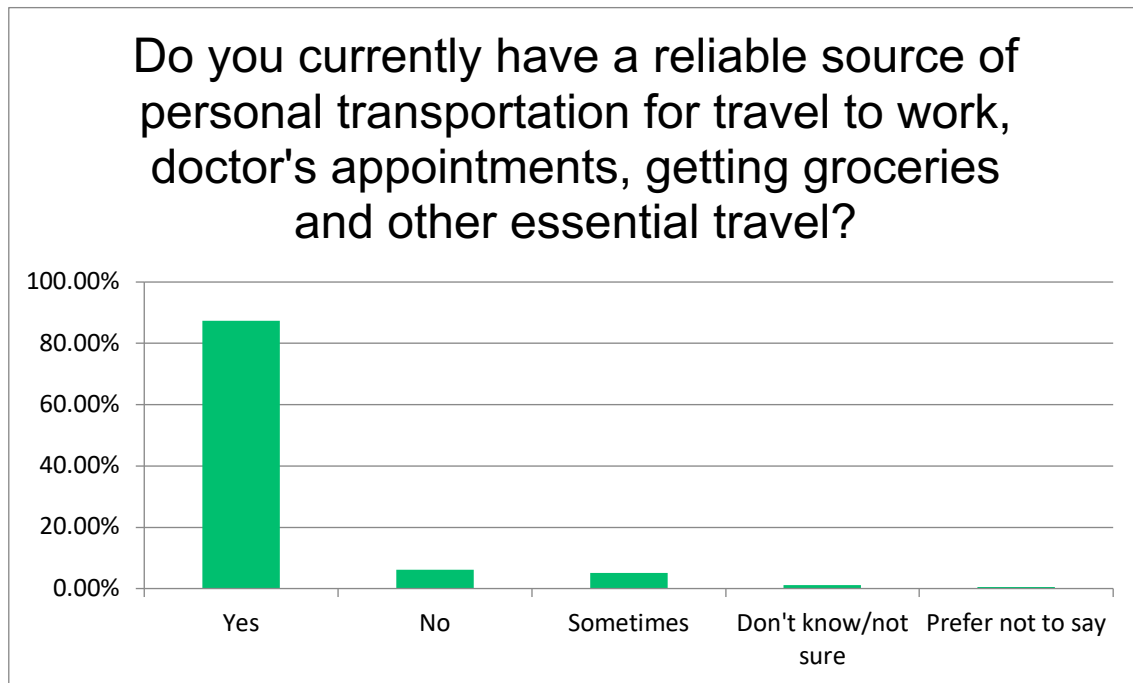


Was there a time in the past 12 months when you needed to see a doctor or Medical professional/healthcare provider but could not because of the cost?



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)?





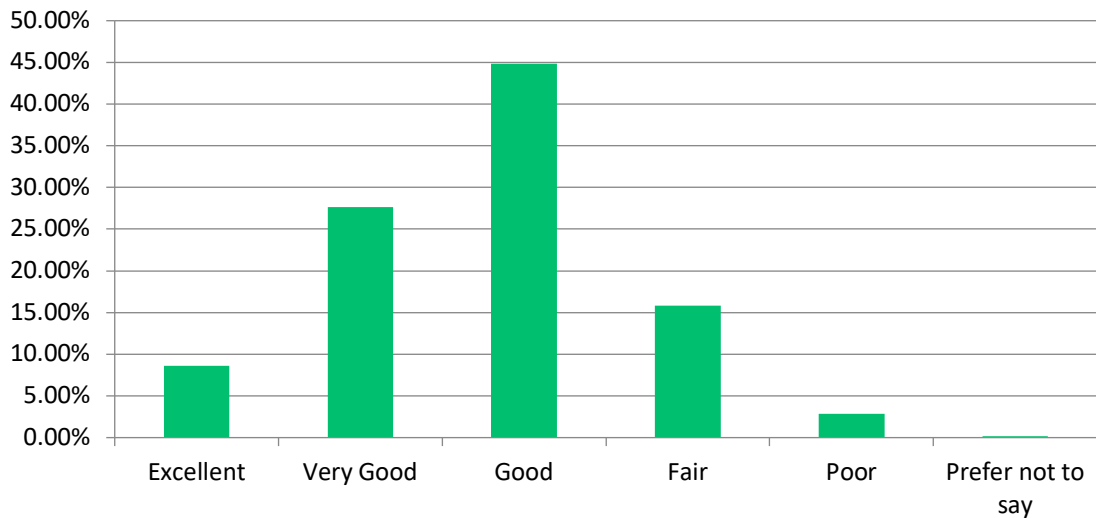
### **Health Behaviors and Experiences**

Survey respondents were also asked to report on their own health behaviors and what they experience as members of a broader community. More than 35% of respondents felt their health was excellent or very good, while approximately 17% felt 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 they had high blood pressure. High cholesterol and arthritis were also other conditions reported.

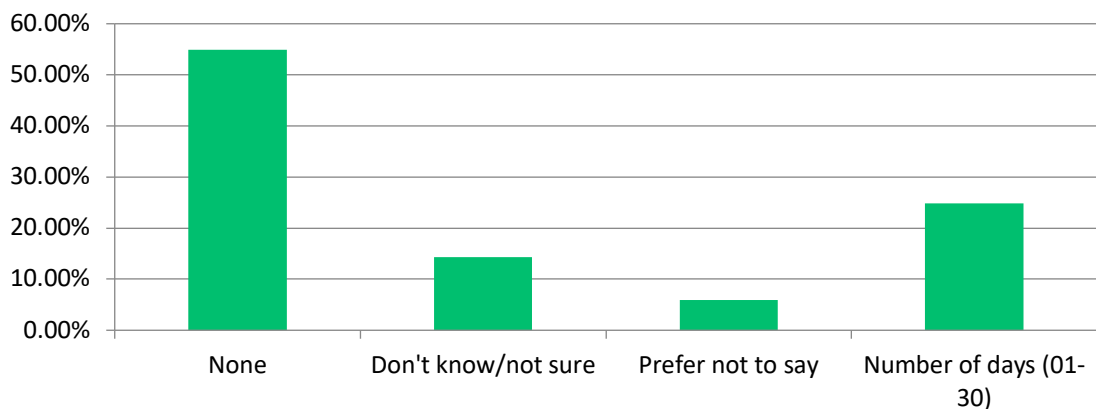
Nearly 19% of respondents indicated they have been diagnosed with a depressive disorder. Another 15% indicated they had difficulty concentrating. When asked who they would seek help from for a mental health or substance use disorder issue, more than 24% indicated they would speak to a physician first.

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

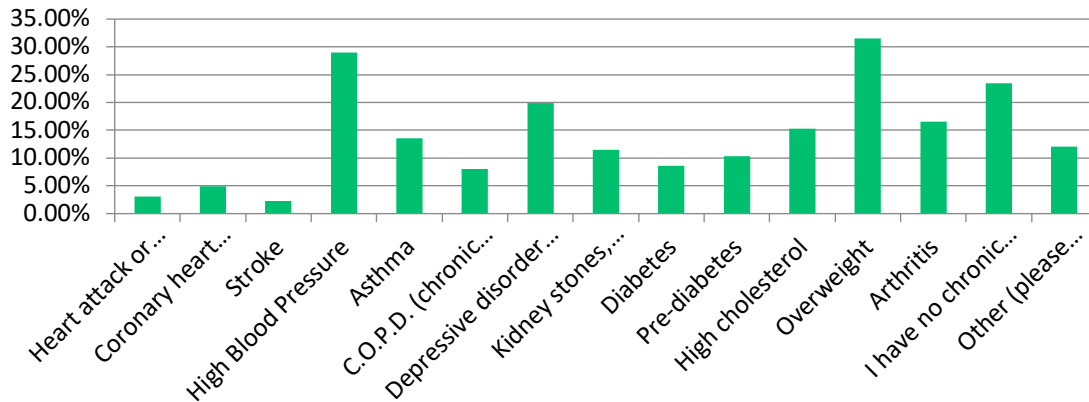
Would you say that in general your health is -



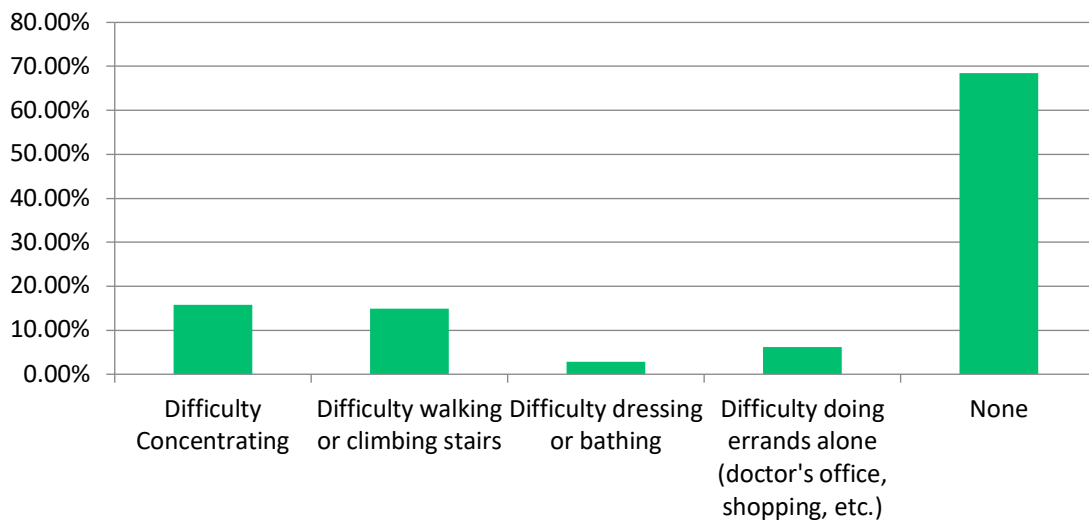
Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?



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

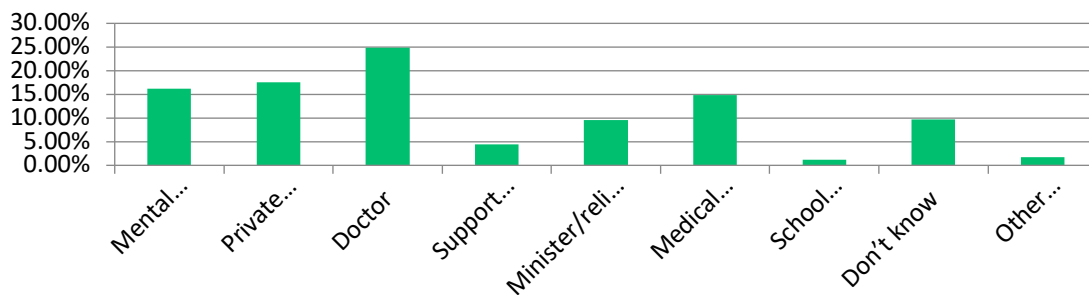


Do you have problems with any of the following (select all that apply)?

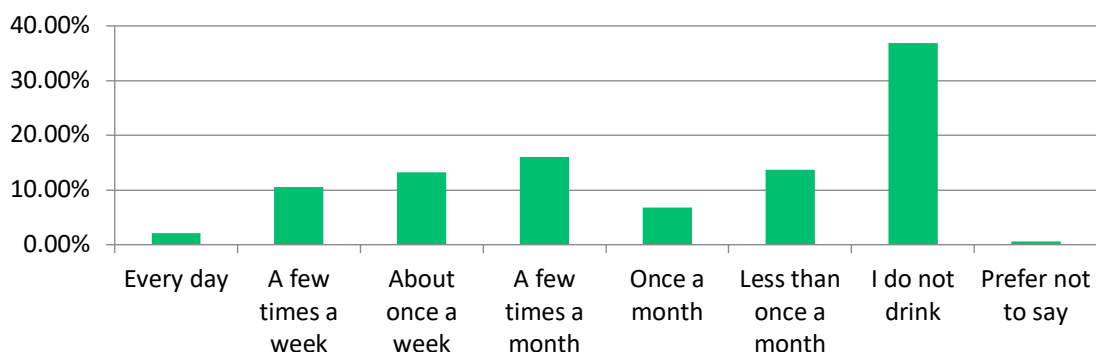




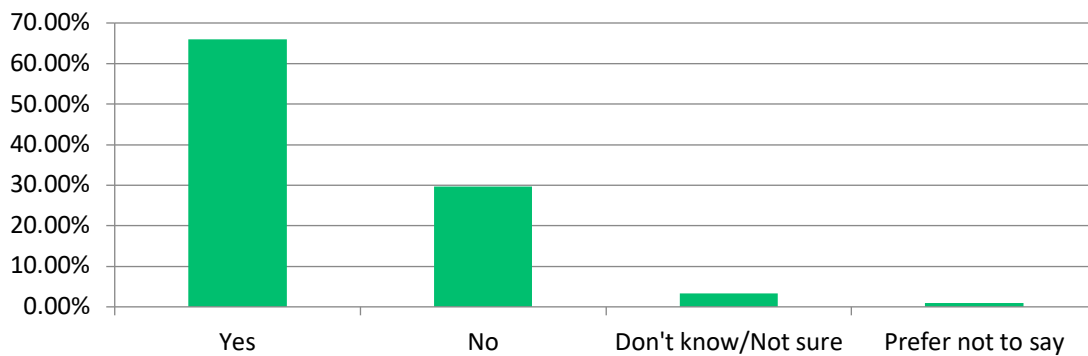
If you, a friend or family member needed counseling for a mental health or a drug/alcohol abuse problem, who is the first person or organization you would talk to or tell them to talk to? (Please choose only one)



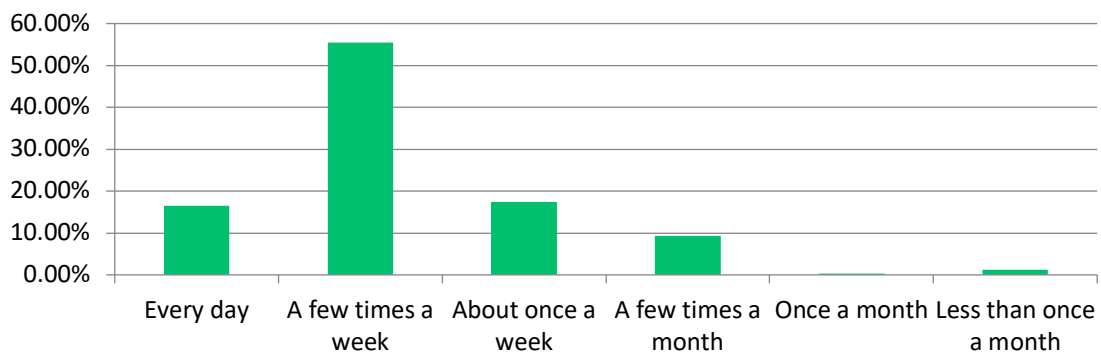
During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage, such as beer, wine or malt beverage liquor?



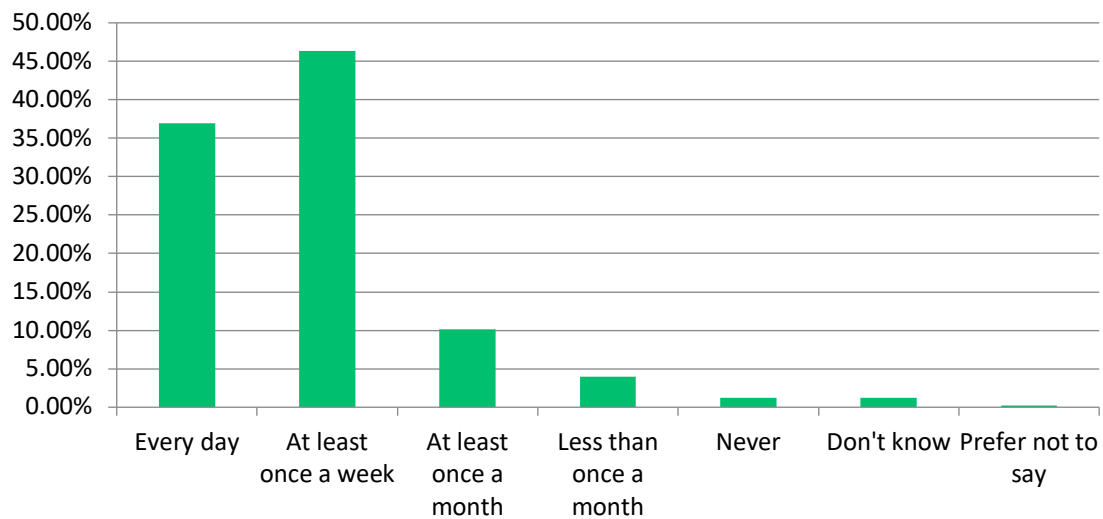
During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, or walking for exercise?



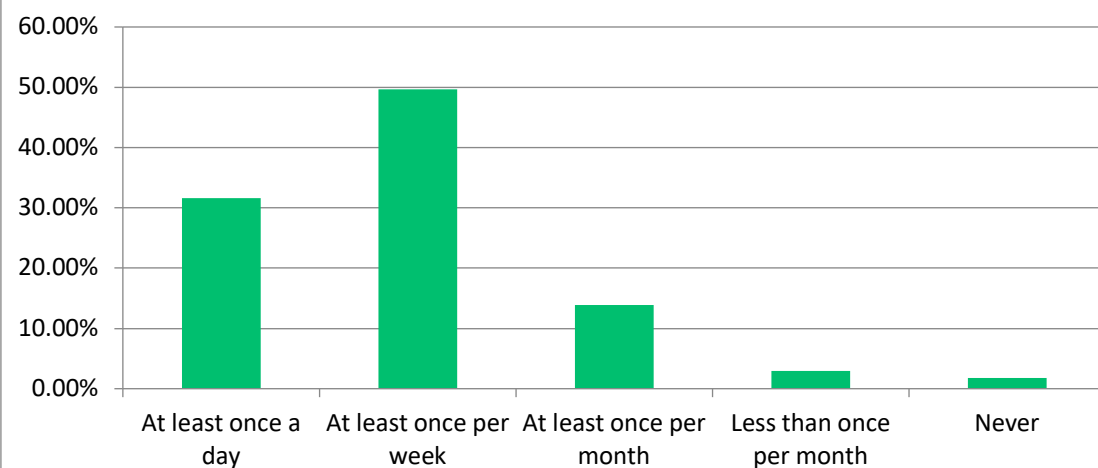
If you answered yes in the last question, how many times per week did you take part in this activity (i.e. running, calisthenics, golf, or walking for exercise, etc.) during the past month?



### How often do you eat fruit? (Not including juices)



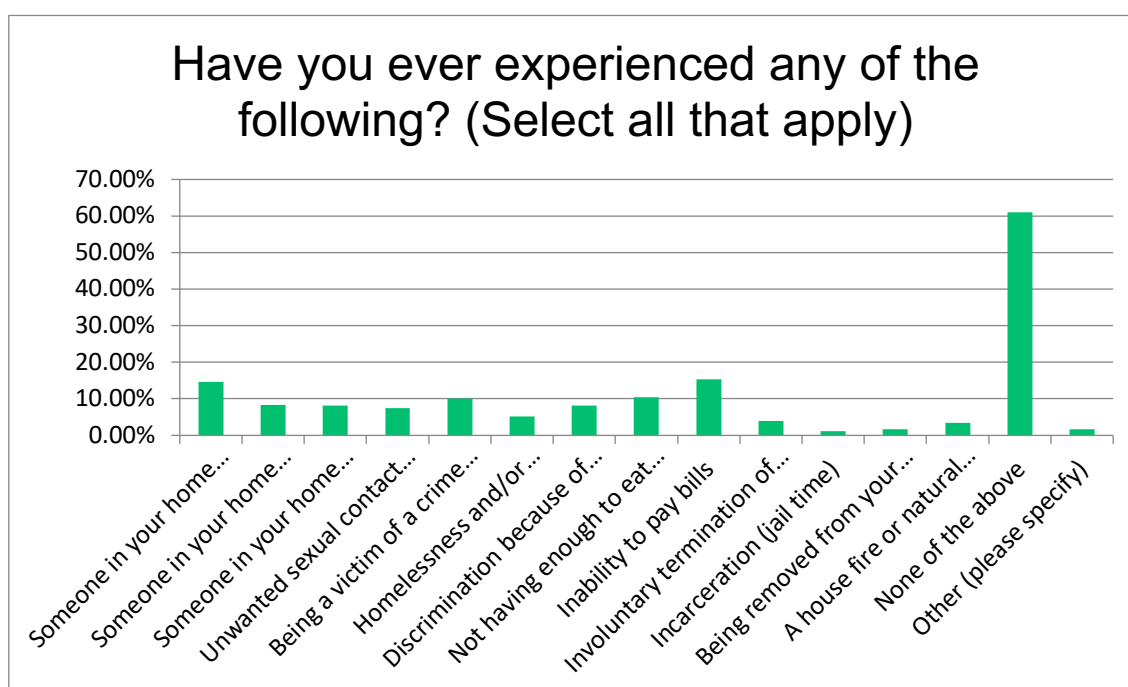
### How often do you eat a green leafy or lettuce salad, with or without other vegetables?



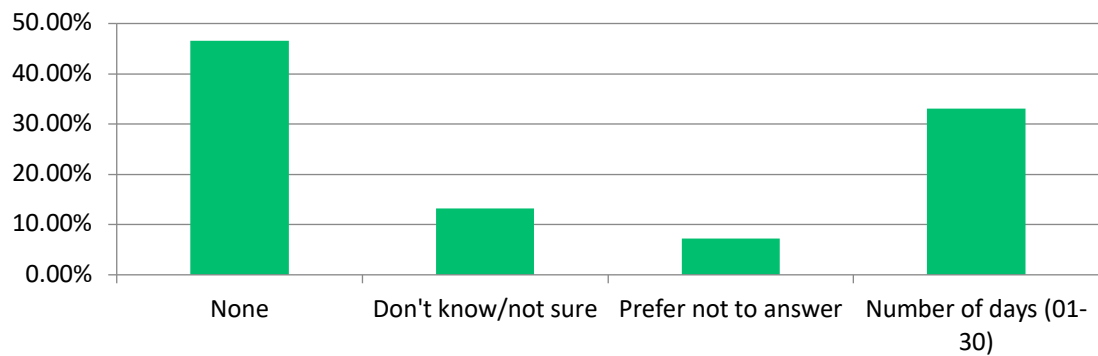
### Quality of Life Indicators

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

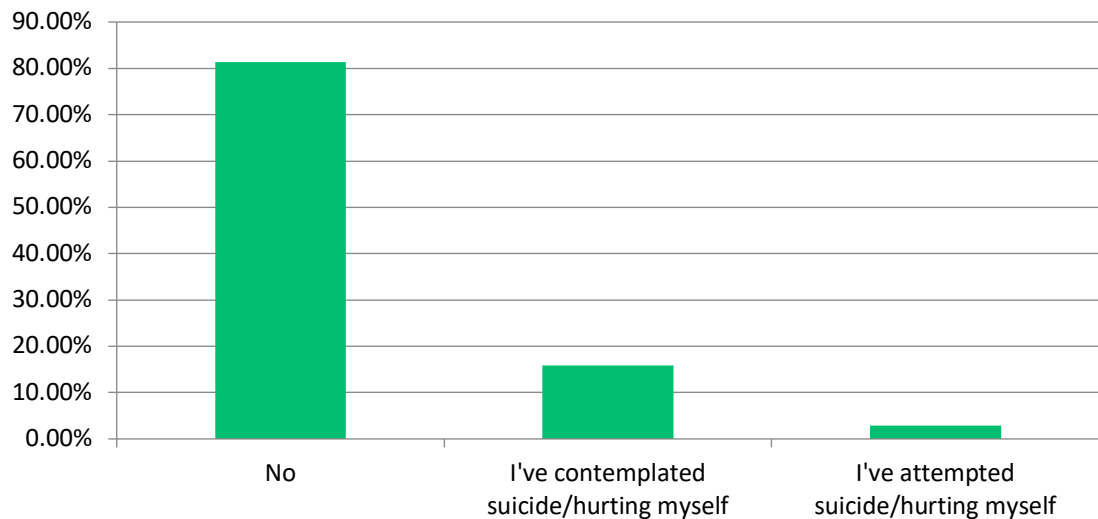
More than 14% of respondents indicated they experienced verbal abuse and another 8% indicated they had been victims of physical abuse. Food insecurity was another factor experienced by more than 10% of respondents. More than 15% of respondents indicated they had considered suicide with 2% of respondents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



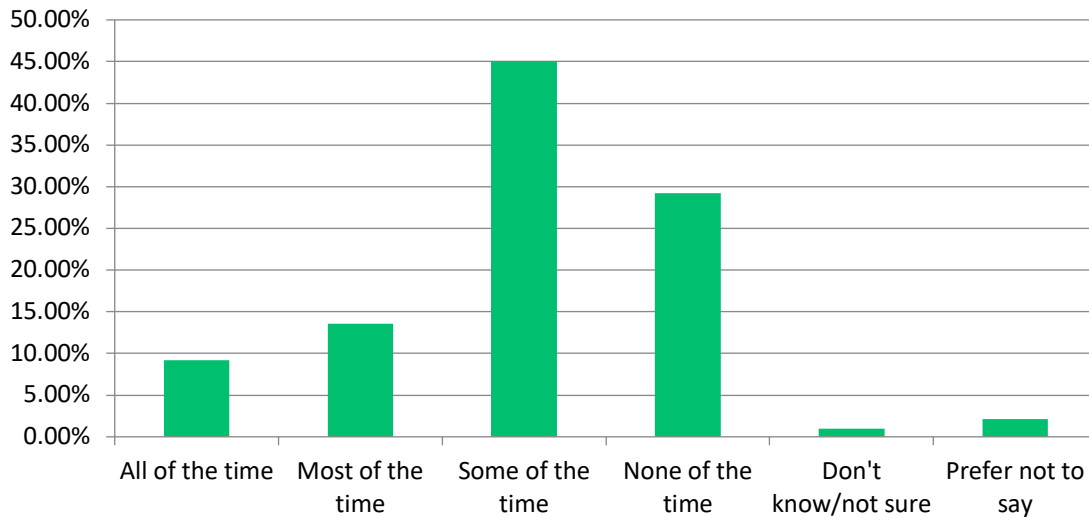
Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?



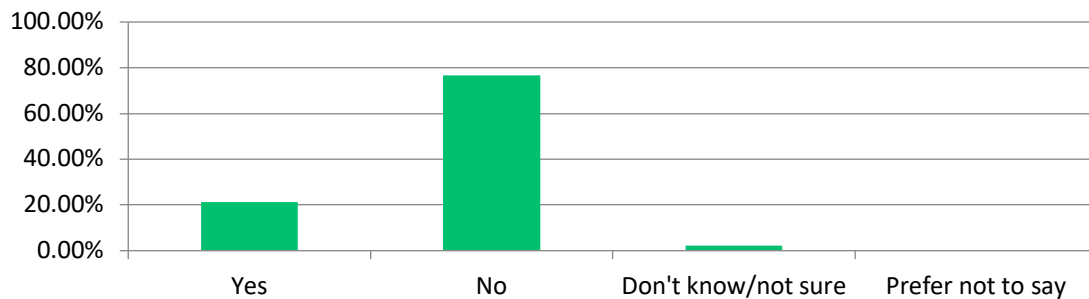
Have you ever contemplated/attempted suicide or hurting yourself?



### During the past year, have you experienced stress related to finances?



### Do you provide food, clothing, financial support, medical care or housing for children other than your biological children (grandchildren, nieces, nephews, family, friends, etc.) Do not include babysitting or occasional visits.

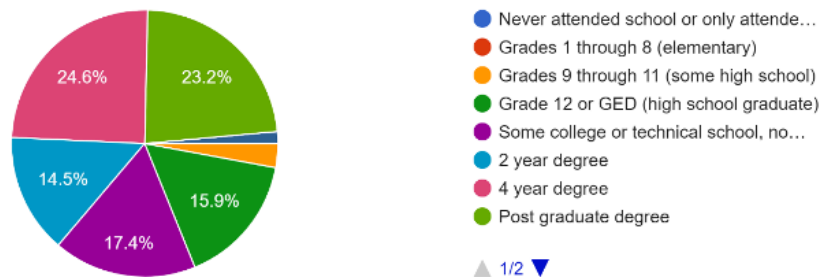


## VII. Community Themes and Strengths Assessment Results

In April of 2022, the HCHD began collecting survey responses for the Community Themes and Strengths survey. This survey is intended to collect feedback from participants about how they view their community. A total of 69 county residents completed the survey. Selected results from this survey are provided below.

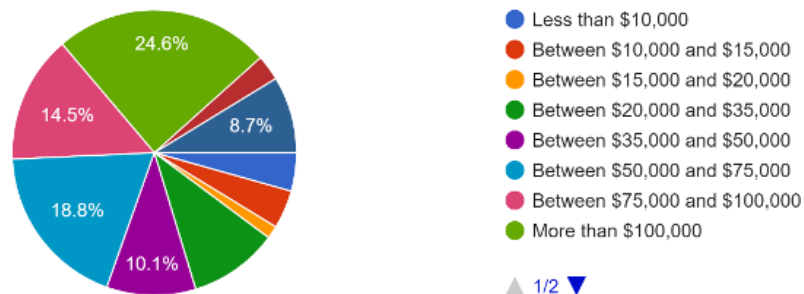
What is the highest grade or year of school you have completed?

69 responses



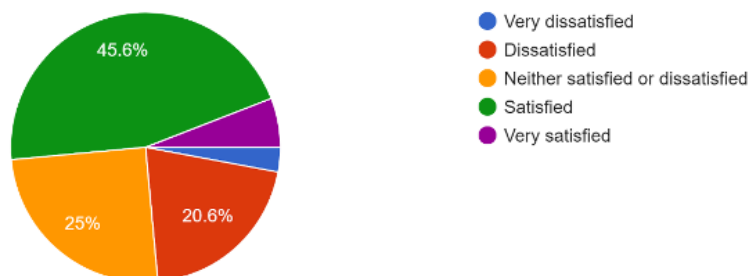
Is your annual household income (from all sources)

69 responses

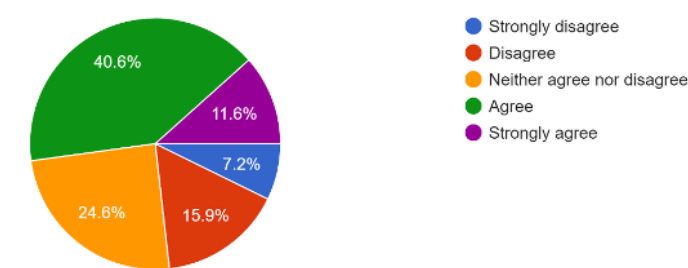


How satisfied are you with the quality of life in Highland County?

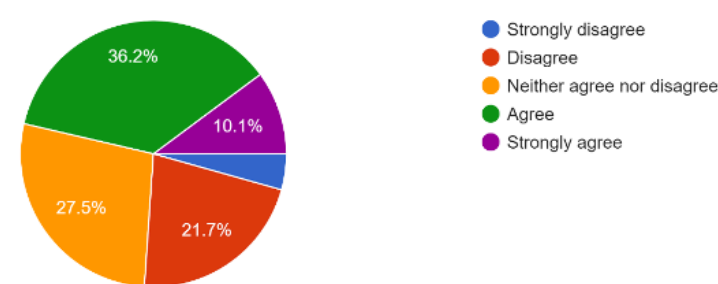
68 responses



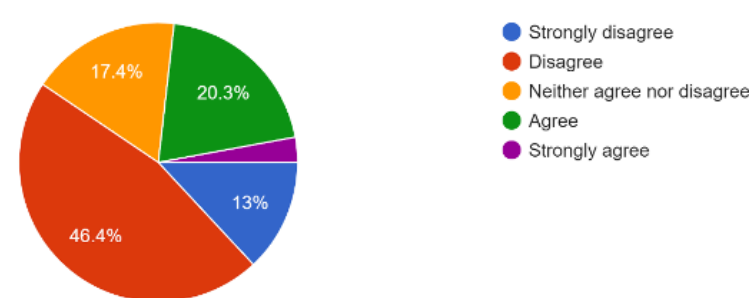
To what extent do you agree with the following statement? Highland County is a good place to raise children.  
69 responses



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

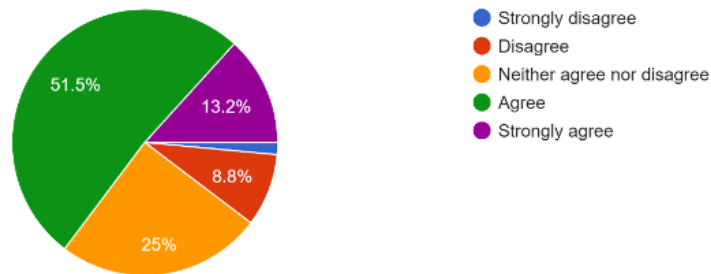


To what extent do you agree with the following statement? There is economic opportunity in Highland County.  
69 responses

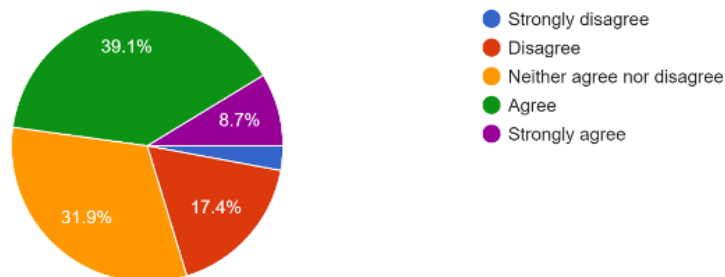




To what extent do you agree with the following statement? Highland County is a safe place to live.  
68 responses



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 2-3 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 2-3 most important issues that must be addressed to improve the health + quality of life in our community?

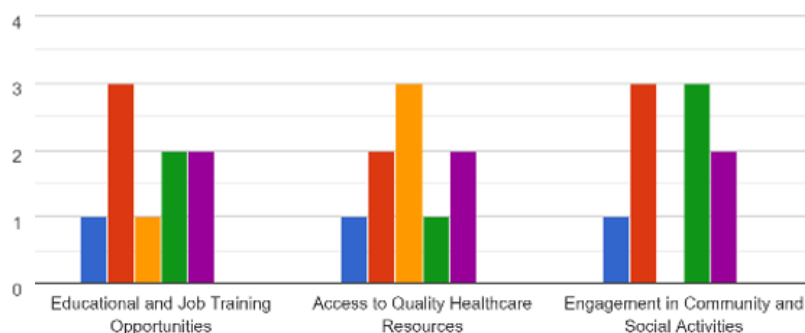
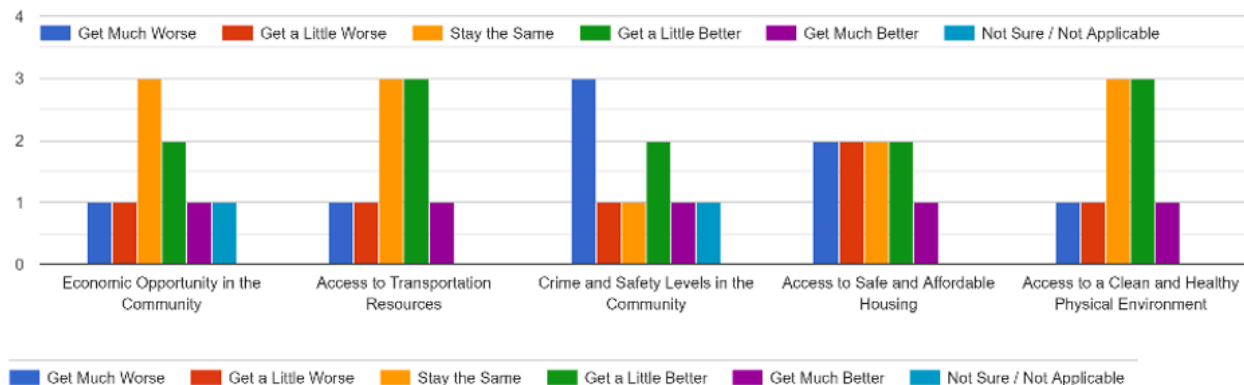
- Access to Mental Health resources and education
- Drug use
- Crime
- More job opportunities
- Create family friendly outdoor spaces

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 (more healthy options)
- Improve the sex education

## **VIII. 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. These forces can be positive or negative. A total of 9 respondents from the community completed this survey. Selected survey results are provided below.



<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-Payor 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.
MonkeyPox 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

## IX. Public Health Systems Assessment

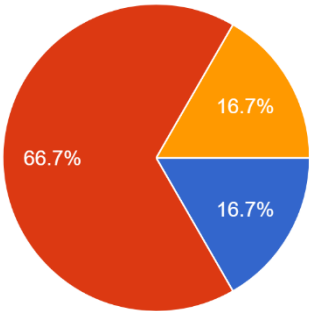
The Public Health Systems Assessment is meant to measure the effectiveness of the public health system in the community. Questions were selected from a large group of potential assessment areas and aimed at measuring specific public health system components that are reflected in both the HCHD Strategic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

Each question is presented with 5 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.

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

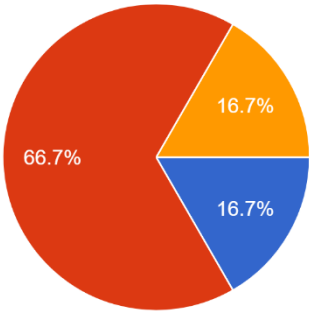
6 responses



- 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.

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.)?

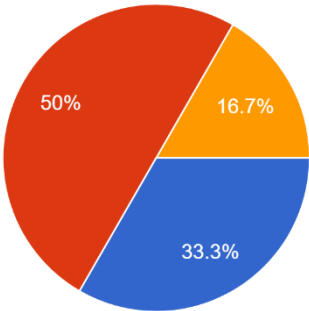
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At what level does the local public health system provide and collect timely and complete information on reportable diseases and potential ...ies, and emerging threats (natural and manmade)?

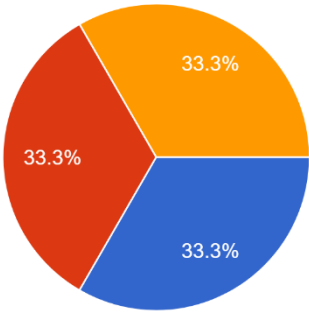
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- No activity- The public health system does not participate in this activity at all.

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?

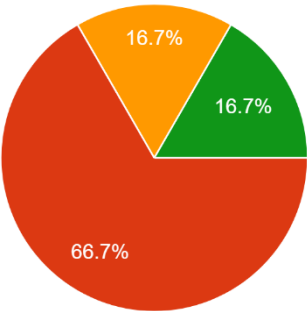
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At what level does the local public health system provide policymakers, stakeholders, and the public with ongoing analyses of community health... recommendations for health promotion policies?

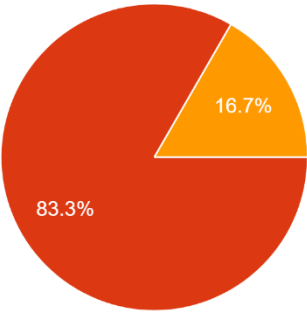
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At what level does the local public health system coordinate health promotion and health education activities at the individual, interpersonal, community, and societal levels?

6 responses

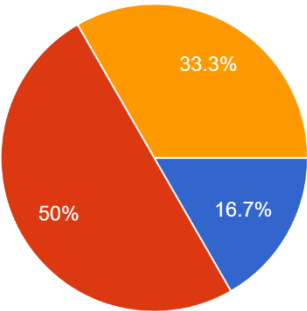


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- No activity- The public health system does not participate in this activity at all.



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

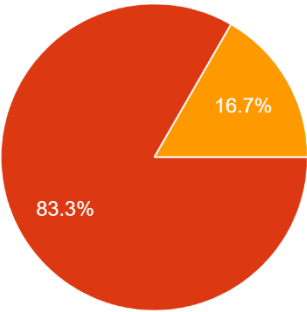
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At what level does the local public health system create forums for communication of public health issues?

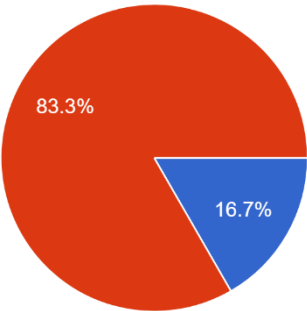
6 responses



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- No activity- The public health system does not participate in this activity at all.

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?

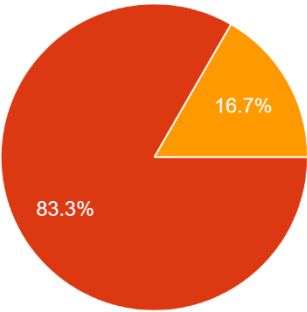
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At what level does the local public health system ensure that the local health department has enough resources to do its part in providing essential public health services?

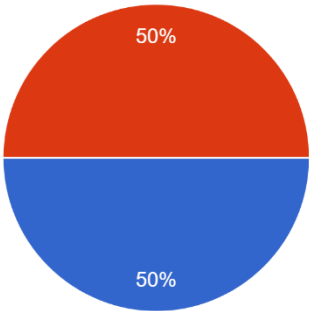
6 responses



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

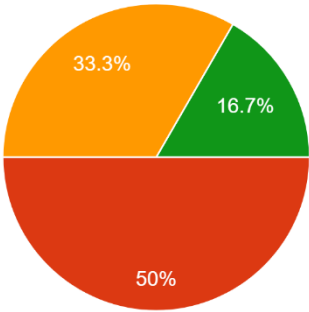
6 responses



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- No activity- The public health system does not participate in this activity at all.

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

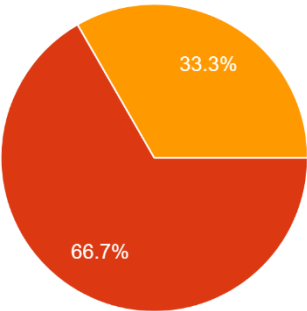
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- Minimal Activity- The public health system provides limited activity and th...
- No activity- The public health system does not participate in this activity at all.

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

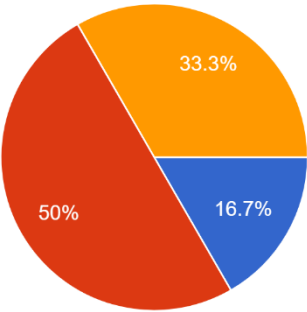
6 responses



- 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.

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.

## X. 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 impact in the community. Data from this assessment will be useful for the community as they develop and plan community 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 what was accomplished in the last plan. Metric driven goals can then be developed to further the efforts around improving priority health issues.

