

# **2022 Community Health Assessment Brown County, Ohio**



**Brown County, Ohio Health Department**

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## EXECUTIVE SUMMARY

In 2022 the Brown County Health Department collaborated with community organizations, governmental agencies with representatives from the medical, business, and civic sectors to define and assess the strengths, opportunities, challenges, and threats relating to health concerns for the county. Over two hundred respondents completed an online survey as part of the process and these results can be found in Appendix B. In this survey respondents identified Strengths, Weaknesses, Opportunities and Threats as a part of a (SWOT) analysis approach with assistance from a Strategic Business Planner and a Professor Emeritus from the Ohio State University. Since the last Community Health Assessment, a variety of survey data has been utilized to complete this current assessment. The assessments which are described in this report provide in-depth studies of the health of the county. Taken as a whole, the assessments continued to identify four major issues facing Brown County. While the first health issues listed, opioid and substance abuse, remain health concerns, mental health was clearly identified as an increased health concern in 2022.

These four major health issues are:

1. Opioid, substance abuse and mental health issues
2. Coronary heart disease and diabetes
3. Transportation as it relates to access to health care, food deserts and its relation to obesity
4. Lung cancer

By focusing on these priorities and addressing these needs with evidence-based prevention strategies, the health of the community will be improved. A healthier community is critical to enhancing Brown County residents' quality of life and supporting the future prosperity and well-being of all those who live and work in the county.

## **DESCRIPTION OF THE COMMUNITY**

The community for this health assessment is Brown County, Ohio. The county is located in Southwestern Ohio on the western fringe of the Appalachian Corridor in Ohio. Brown County is one of the thirty-two Appalachian Counties. The county is within one hour of Cincinnati and is included in the Metropolitan Statistical Area. Georgetown serves as the county seat with a population of 4,243. The county at the time of this writing has over 43,000 residents. The county's population has decreased by over 1200 since the last census. Other villages in the county are Aberdeen, Fayetteville, Hamersville, Higginsport, Mount Orab, Ripley, Russellville, Sardinia, and St. Martin. Unlike most counties, there is no large municipality. Rather, the villages are scattered throughout the rural Appalachian County. Each operates under its own governmental jurisdiction. The county is divided into sixteen political subdivisions called townships.

The county has a strong agricultural base with rural roads and three major highways connecting the county to larger populated regions. The largest employer is the county school system followed by nursing homes and rehabilitation service facilities. From the north end of the panhandle to the southern extremity along the Ohio River, Brown County traverses the longest distance in the State of Ohio. This is critical when it comes to transportation needs for the citizens which struggle to obtain quality health care, healthy food, and their ability to obtain needed services.

No public transportation exists and only one taxi service serves the northern tier of the county. Nearly 6% of the households in the county have no motor vehicle and this is at a lower rate than Ohio and the nation. Transportation issues result in less community engagement, isolation, and a challenge to obtain necessary health care.

There are five school districts in the county serving 6,652 students in pre-school through 12th grades. (The chart below reflects the k-12 population.) The districts are served by Southern Hills Career and Technical Center which has a career and information technical program for middle school students at the local school sites in addition to serving juniors and seniors from each of the high schools in twelve academic and vocational areas.

**BROWN COUNTY K-12 POPULATION  
FIVE SCHOOL DISTRICTS**

District	Student Population	Federal Free and Reduced lunch rate
Eastern Brown Local Schools	1,124	68.00%
Fayetteville Perry Local Schools	942	42%
Georgetown Exempted Village Schools	1002	54%
Ripley Union Lewis Huntington	800	78.8%
Western Brown	2,784	52%

\*Data from the Ohio Department of Education Profiles

According to data from the Ohio Department of Health, Brown County Ranks 74 out of 88 in overall health outcomes.

Further information on Brown County demographics can be found in the appendix.

## **COMMUNITY HEALTH ASSESSMENTS**

### **Methodology and Assessment Process**

Results were generated from county-wide surveys completed by community, business, health professionals, governmental entities, faith based and educational institutions.

Assessments were gathered from the following organizations and independent sources:

- Brown County Educational Service Center Thriving Communities
- Adams/Brown Economic Opportunities organization
- Brown County Board of Health and Addiction Services
- Future Plans/Growing Rural Independence Today (GRIT)
- Brown County Educational Service Center 40 Development Assets Program
- Brown County Health Department
- Interact for Health
- Local School District

The staff at the Brown County Health Department work collaboratively with various organizations and community partners to serve the needs of the citizens. Therefore, at least one staff member from the Health Department was present for these assessment processes.

#### **1. BROWN COUNTY EDUCATONAL SERVICE CENTER THRIVING COMMUNITIES:**

The first assessment was a broad-based community facilitated process. This involved three different meetings conducted by the Brown County Educational Service Center with an Ohio State Emeritus faculty member and a Strategic Planner. The first assessment was to obtain data for the Brown County Thriving Communities process which centers on emotional and mental health. The Brown County Educational Service Center serves the five school districts shown in the previous chart. The original process completed for the first CHA, involved over forty-five key leaders from business, industry, governmental services and agencies, youth (teens from the local high schools), school district personnel and concerned citizens. This process led to the identification of issues, action steps and a plan for implementing strategies to impact health issues.

## **2. ADAMS BROWN ECONOMIC OPPORTUNITIES ORGANIZATION:**

The second assessment was conducted by the Adams Brown Economic Opportunities Organization. This agency serves the needs of the most vulnerable population in the counties of Adams and Brown. The agency used a one-page ranking system to determine outcomes to address health concerns.

## **3. BROWN COUNTY BOARD OF MENTAL HEALTH AND ADDICTION SERVICES:**

A third assessment was conducted by the Brown County Board of Mental health and Addiction Services (BCMHAS) who worked with Talbert House, a recovery and addiction counseling service in Brown County, to develop a long-range strategic plan around the issue of substance abuse. This agency utilized community representatives from the schools, governmental agencies, community members, civic organizations, chamber representatives from the community in the identification of strengths, needs, opportunities and challenges. A strategic plan which centers on opioid use and reduction practices was created. It will be reported upon in depth in the document. Members of the Brown County Health Department staff serve on this committee.

## **4. FUTURE PLANS/GROWING RURAL INDEPENDENCE TODAY (GRIT) ORGANIZATION:**

The fourth assessment consisted of two comprehensive planning sessions that were conducted by the Brown County Educational Service Center in which forty community leaders participated. The sessions were designed to address and identify key issues affecting Brown County. Session participants identified healthy lifestyles, transportation, mental health, and substance abuse among their top priorities further supporting national, state, and local data.

## **5. BROWN COUNTY EDUCATIONAL SERVICE CENTER 40 DEVELOPMENTAL ASSET PROGRAM:**

A fifth assessment was completed with over 600 sixth graders as a part of the 40 Developmental Asset program which is conducted by the Brown County Educational Service Center with the county schools. The assessment identified risky behaviors which reduce student outcomes for resiliency and measures students' perception of healthy life choices.



## **6. BROWN COUNTY HEALTH DEPARTMENT:**

The sixth assessment was completed by the Brown County Health Department via an online survey instrument with community partners representing the aforementioned community segments and those listed below. Survey participants were asked to rank health-related priorities for the county. Survey participants were: Brown County Commissioners, Brown County Board of Mental Health and Drug Addiction Services, Ohio Department of Youth Services, Department of Job and Family Services, Adams/Brown Community Action, Brown County Educational Service Center, Brown County Department of Developmental Disabilities, Brown County Children and Family First, YWCA, Brown County Pre-school, Brown County Head Start, Child Focus, School Administrators, School Improvement Supervisors, Brown County Community Connectors Grant Coordinator, parents, and the HIPPIY Child Care Program.

As a result of the multi-tiered assessment over 1,000 adults and students were surveyed and data was compiled to determine health and infrastructure issues as they relate to healthy lifestyles. Action plans were developed to address the prioritized issues. Five health priorities ranking highest were: 1) access to health care; 2) cancer; 3) diabetes; 4) heart disease and stroke; and 5) mental health problems. Four of these health issues have been identified by the Brown County Health Department as priorities in previous assessments. From this recent survey, mental health is one health issue which showed an increased concern in the community.

## **7. INTERACT FOR HEALTH:**

A seventh assessment survey was conducted on a twenty-county regional basis in which Brown County was included. This survey was conducted by Interact for Health as a part of their overall mission to improve the quality of life through health and lifestyle education. This agency serves twenty counties surrounding Cincinnati, Ohio. This process was a part of Interact for Health's Thriving Communities process.

Through these various assessments the health priorities for the county were identified. Data, both quantitative and qualitative, were aggregated in support of the identification of the priority areas.

## 8. LOCAL SCHOOL DISTRICT SURVEY

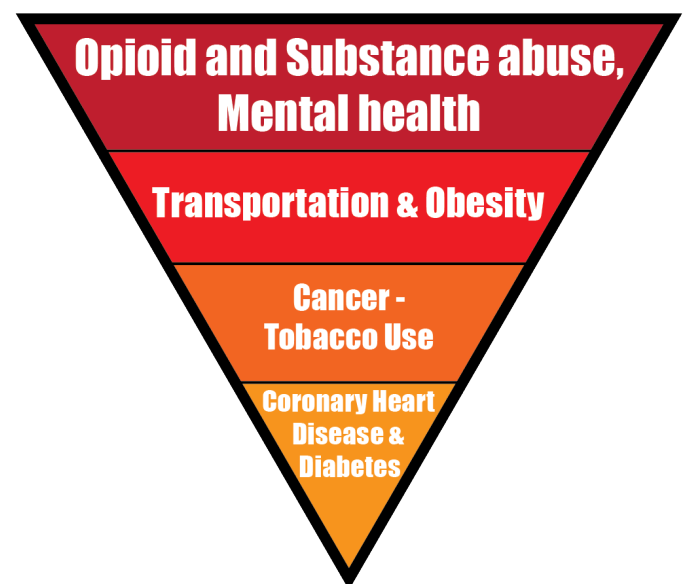
An eighth assessment was done using an online survey tool. Four hundred and six (406) students from sixth grade to high school seniors were surveyed to ascertain health and family issues. Sixty-four percent (64%) of the students indicated they lived with both biological parents, while twenty-five percent (25%) lived with one parent. Thirty-two percent (32%) of the students indicated that there were mental health concerns in the household. The survey was completed during the Covid-19 pandemic. Seven-point six percent (7.6%) indicated there was a loss of family income during the pandemic. Twenty-five percent (25%) of the students indicated they were involved in some type of counseling for mental health issues. The Brown County Health Department will evaluate these needs for future collaboration with the local providers.

## COMMUNITY HEALTH PRIORITIES

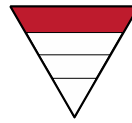
The community health priorities were developed based on the surveys, and the evaluation of county, state, and national data trends for Brown County.

### Health Priorities for Brown County:

1. Opioid and Substance Abuse and Mental Health
2. Transportation and Obesity
  - a. Primary care and Hospital Facilities
  - b. Obesity and Food Deserts
3. Cancer-Tobacco Use
4. Coronary Heart Disease and Diabetes



## Opioids, Substance Abuse and Mental Health:



Brown County, like many counties in Ohio and across the nation, is facing an opioid epidemic. Brown County ranks in the top ten in Ohio per capita for drug overdoses directly relating to opioid usage. In January 2017, sixteen overdose cases were recorded by emergency and law enforcement personnel as our current 2021 data indicates a 35% increase in overdoses. The Coalition for a Drug Free Brown County was formed seven years ago to address the issue from a community standpoint. The Brown County Health Department has been an integral part of this effort from the start. The Coalition is comprised of government officials and agencies, business leaders, faith-based organizations, interested citizens, counseling centers, and law enforcement. The Brown County Health Department provides technical support and training as a part of the Coalition. Naloxone is provided through a grant to the health department. The health department has been proactive in educating the community about this life-saving medication. This past year they distributed 497 Naloxone kits and installed a “vending” machine that residents may access 24/7 to secure Naloxone.

Children’s’ Protection Services, a division of the Department of Job and Family Services, has seen an increase in the number of youths being placed in foster care due to drug dependency. There has been a 67% increase in the number of children removed from their families from 2017 to 2022.

Emergency personnel, law enforcement and the Brown County Health Department continue to collaborate in providing the education and administration of Naloxone.

Hepatitis C is often related to drug use. Reports from the health department from 2014 to 2016 indicated 80 confirmed cases of Hepatitis C. In 2021 cases increased to 220, an increase of 46%. The frequency rate increased among adults ages 25 to 44 years of age.

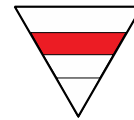
A strategic plan has been developed as a first response to this overriding issue in the county. The Brown County Health Department staff contribute their expertise to the Strategic Planning process and are a part of the implementation plan.

The Coalition for a Drug Free Brown County has identified the following goals in their strategic plan:

- **Decrease the availability of illicit drugs in Brown County**
- **Reduce deaths and new cases of infectious diseases associated with drug use**
- **Increase funds to support prevention efforts**
- **Increase access to addiction treatment**
- **Expand health care, treatment, and after care opportunities for people who are addicted**

- **Provide drug education for county residents**
- **Increase youth prevention programs throughout the county**
- **Develop and implement community-based initiatives that promote healthy behaviors and that support successful recovery**

### **Transportation, Primary Care and Hospital Facilities:**



Transportation is a health issue as health care providers can be significant miles from residents' homes. Distance to groceries with healthy food choices are often few and far between. Six percent of the residents are without transportation services. The chart below reflects the number of health care providers by village. Many of the residents not only reside in the villages but also in the surrounding rural areas. The Brown County Hospital closed seven (7) years ago leaving the county without this direct care provider. Residents could meet with specialists from Cincinnati when the hospital was open, but now they must travel to Cincinnati which is approximately an hour away for needed health care. Only one urgent care facility is open twenty-four hours a day in Mt. Orab.

The following chart reflects the number of health care providers by village with only one 24-hour urgent care available in the county.

#### HEALTH CARE PROVIDERS AND FACILITIES BY VILLAGE IN BROWN COUNTY, OHIO

Village	Medical Facility /Pharmacy	Distance from the Village to the Closest Medical Facilities- for residents in the outlying areas the distance increases
Aberdeen	0	2 miles-travel to Kentucky to obtain medical, dental, and primary care.
Decatur	0	7 miles to a primary care Physician Eye doctor Dentists
Fayetteville	0	25 miles to the closest hospital 13 miles to an urgent care facility
Georgetown	3 dentist offices 4 primary care facilities 1 pediatrician 2 pharmacies	14 miles to an urgent care facility
Higginsport	0	11 miles to dentists and primary care facilities- 18 miles to a hospital
Mt Orab	1 dentist office 2 primary care facilities 1 urgent care facility 1 pharmacy 1 Little Clinic 1 Pediatric care facility 1 Eye Care facility 2 Chiropractor offices	12 miles to a hospital
Ripley	1 dentist 1 primary care facility 1 pharmacy	14 miles to a hospital in Kentucky
Russellville	0 health care facilities	11 miles to dentists, primary care physicians, and pharmacies 19 miles to an urgent care 18 miles to a hospital
Sardinia	1 primary care facility 1 pharmacy	22 miles to a hospital

## **Transportation, Obesity and Food Deserts:**



Brown County ranks above the state average in relation to obesity. Obesity is linked to serious health problems. This includes diabetes, heart disease, asthma, some cancers, and poor mental health. According to the U.S. Department of Health and Human Services Center for Disease Control and Prevention, adult obesity in Brown County is 42.6% of the population while the U.S. median is 30.4%. One of the critical issues is food deserts. Food deserts are defined as geographic areas where access to affordable healthy food options is limited. Food deserts are an issue in rural counties as well as urban areas. In the United States it is estimated that 23.1 million citizens live in areas defined as food deserts. Brown County communities reflect this same statistic. Only 3 general supermarkets exist within the county, with the local villages served by convenient food stores, gas stations or small discount store chains with many processed foods available for purchase. The following chart reflects the food markets in the county. With transportation as a key issue, consumers have limited choices and as a result rely upon processed, high sodium, and less nutritious food products or fast-food restaurants.

In the last year one of the retail sites in Georgetown has added a small fresh produce section, but no information is available upon the writing of this document to ascertain on the success of this venture in terms of consumer purchases and or the quality of the items for sale at the location.

## FOOD STORES AND MARKETS LOCATED IN BROWN COUNTY, OHIO

Village	<b>Supermarket</b> <b>Convenience Store</b> <b>Gas Station</b> <b>Fast Food Restaurants</b> <b>Sit down Restaurants</b>	Distance to a Supermarket
Aberdeen	3 Gas Stations with snacks 3 fast food restaurants 1 convenience store 2 sit-down restaurants One farmers market operating in the summer	8 miles
Decatur	1 convenience store without fresh food choices	8 miles
Fayetteville	3 gas stations with limited food choices 4 sit-down restaurants 1 convenience stores	14 miles
Feesburg	1 gas station	15 miles
Georgetown	5 gas stations with limited food choices 2 grocery stores 6 sit-down restaurants 7 fast food 6 convenience stores	13 miles
Hamersville	2 gas stations with limited food choices 1 convenience store 2 sit-down restaurants	11 miles
Higginsport	1 sit-down restaurant 1 convenience store	11 miles
Mt Orab	1 supermarket (major superstore part of a national chain) 6 gas stations 3 convenience stores 12 fast food restaurants 8 sit-down restaurants	0 miles
Ripley	4 fast food 1 gas station with limited food choices 7 sit-down restaurants 3 convenience stores	14 miles
Russellville	1 gas station with limited food choices 2 convenience stores 2 sit-down restaurants 1 meat supplier	11 miles
Sardinia	3 gas stations with limited food choices 2 convenience stores 2 sit-down restaurants 2 fast food	9 miles
Williamsburg	1 gas station with limited food 2 convenience stores 1 seasonal restaurant	8 miles
Winchester	1 gas station	18 miles

## Healthy Lifestyles in Brown County, Ohio

This factsheet compares healthy lifestyle indicators in Brown to those of the entire state of Ohio and its best-performing counties. This comparison will help highlight any disparities and reveal opportunities for improvement. Health is influenced by both individual health behavior and the systems which produce the environments and choices available to us. This is especially true for children. Overall population health may be indicative of the ability of children to live healthy lifestyles, while socioeconomic factors determine the resources available for health.

**Table: Population Risk Factors for Obesity**

**Best in OH (of 88 counties)**

	<i>Brown</i>	<i>OH average</i>	<i>Best county</i>	<i>County name</i>
<b>Overall population health</b>				
% of adults obese	29	28	27	Hamilton
<b>ADULT OBESITY RANK</b>	<b>32</b>		<b>1</b>	<b>Hamilton</b>
% of adults with diabetes	9.8		8.2	Medina
% of low-income preschoolers obese	9.8		5.9	Columbiana
<b>HEALTH OUTCOMES RANK</b>	<b>52</b>		<b>1</b>	<b>Delaware</b>
<b>Socioeconomic factors</b>				
% of children in poverty	20	18	5	Delaware
income inequality: Gini coefficient	39	45	34	Morrow
% single-parent households	10.5	10	5.5	Holmes
<b>SOCIOECONOMIC RANK</b>	<b>57</b>		<b>1</b>	<b>Delaware</b>
<b>Nutrition environment</b>				
% low income & >1 mile to store	25.5		4.4	Cuyahoga
grocery stores per 10,000 people	1.8		4	Wyandot
fast-food restaurants per 10,000 people	6.2		2.7	Holmes
farmers markets per 10,000 people	0.2		1.4	Morgan
% low-income receiving SNAP*	29		51	Muskingum
stores accepting SNAP* per 10,000 people	7.7		14.1	Meigs
stores accepting WIC* per 10,000 people	1.4		3.3	Harrison
% of zip codes with a healthy food outlet	27	45	75	##
<b>Physical activity environment</b>				
# of air pollution-particulate matter days	1	5	0	##
# of air pollution-ozone days	3	9	0	##
recreation & fitness facilities per 10,000	0.5		2.1	Monroe
<b>PHYSICAL ENVIRONMENT RANK</b>	<b>29</b>		<b>1</b>	<b>Jackson</b>

\* SNAP=Supplemental Nutrition Assistance Program; \* WIC=Women, Infants and Children; Best county: ## denotes a tie for Best county

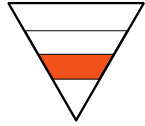
**Rankings:** 1 is best; HEALTH OUTCOMES RANK: self-reported health, physically and mentally unhealthy days, low birth weight, premature death

SOCIOECONOMIC RANK: highschool and college education, child poverty, income inequality, social support, single parent households, violent crime or homicide

PHYSICAL ENVIRONMENT: healthy food and liquor store densities, unhealthy air quality days



## Cancer and Tobacco Use:



Cancer is among the leading causes of death worldwide. It's the second leading cause of death in the United States, exceeded only by heart disease. As a result, an extensive amount of research has been given to cancer. The Center for Disease Control studies indicate that cancer will surpass heart disease in a few years. Many national health organizations have focused their research efforts on cancer incidences and mortality.

The World Health Organization says that one third of deaths from cancer are due to the 5 leading behavioral and dietary risks: high body mass index, low fruit and vegetable intake, lack of physical activity, tobacco use, and alcohol use. Lung cancer is the leading cause of death worldwide with 2.21 million deaths in 2020.

More people in the United States die from lung cancer than any other type of cancer. Tobacco use is the most important risk factor for cancer and is responsible for approximately 22% of cancer deaths. In addition, tobacco use, alcohol use, unhealthy diet, and physical inactivity are major cancer risk factors worldwide and are also the 4 shared risk factors for other non-communicable diseases. Health assessments which have been done in Brown County also show the same health risks.

The National Cancer Institute states that in 2021, there were 14 million new cases and 8.2 million cancer-related deaths worldwide. The number of new cancer cases will rise to 22 million within the next two decades. According to the National Cancer Institute, cancer is the name given to a collection of related diseases. In all types of cancer, some of the body's cells begin to divide without stopping and spread into surrounding tissues. A study published in the "Journal of the American Medical Association" found that lung cancer kills more people in the U.S. than any other cancer, and smoking is the leading cause of lung cancer incidence and mortality.

Health disparities are significantly different between one population and another. The Department of Health and Human Services defines health disparities as the difference in health outcomes that are closely linked with social, economic, and environmental disadvantage and are often driven by social conditions in which individuals live, learn, work and play.

Cancer health disparities are adverse differences between certain population groups in cancer measures. These population groups may be characterized by race, ethnicity, disability, gender and sexual identity, geographic location, income, education, and other characteristics. Generally, people who are from low socioeconomic backgrounds, who may lack health insurance and are medically underserved with limited or no access to effective health care, often bear a greater

burden of disease than the general U.S. population. One can surmise that Brown County falls into a number of these disparities such as geographic location, income, and education. Therefore, overall health disparities, which include cancer, are also a concern for Brown County.

Research shows that individuals from medically underserved populations, such as Brown County, are more likely to be diagnosed with late-stage diseases that might have been treated more effectively or cured if diagnosed earlier. Financial, physical, and cultural beliefs are also barriers that prevent individuals or groups from obtaining adequate health care.

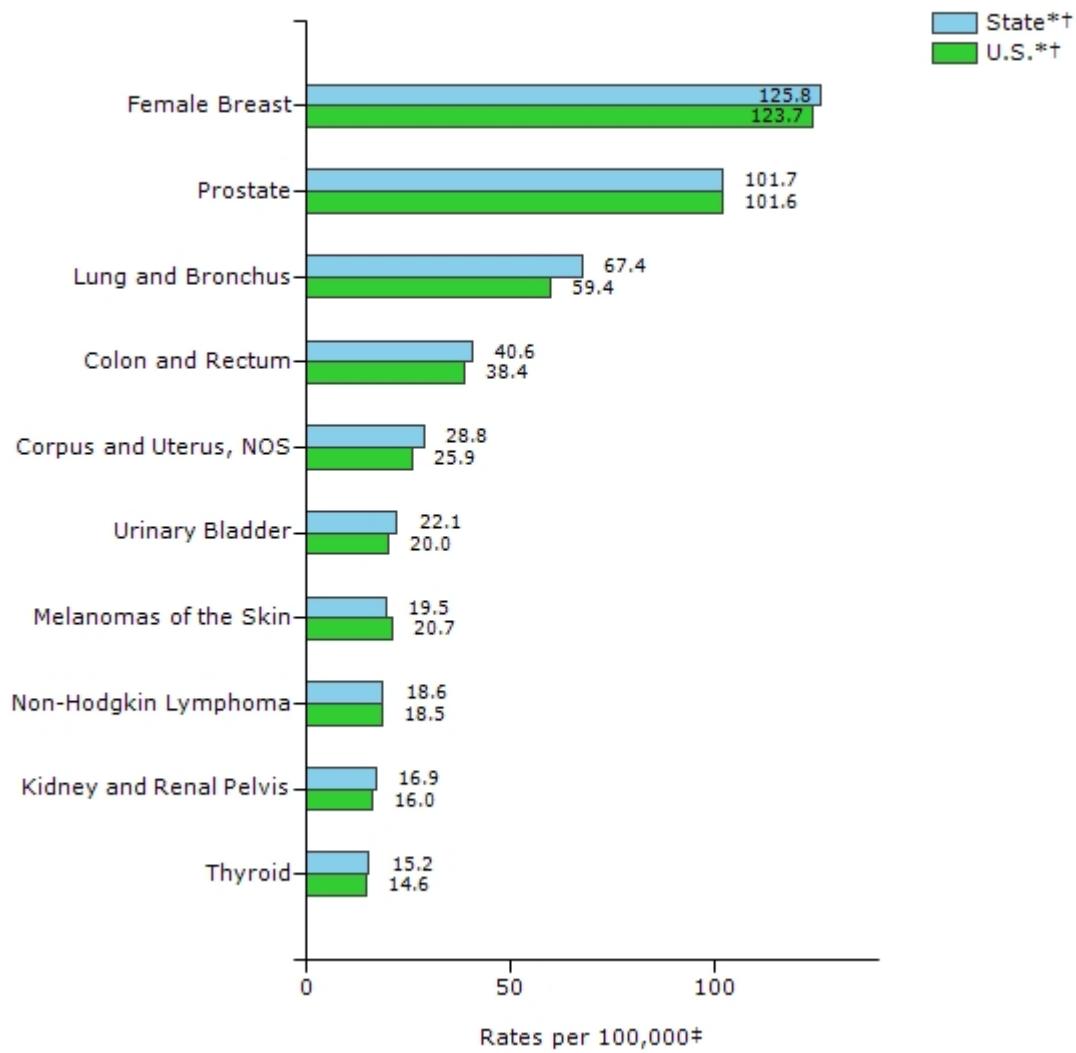
Ohio's incident rate of lung and bronchus cancer is 67.4 compared to the national rate of 59.4. (See chart below) According to the Ohio Department of Health cancer report, lung cancer follows prostate cancer as the second cause of incidences and deaths for men, and it follows breast cancer as the second cause of incidences and deaths for women. According to the "Cancer in Ohio 2016" report, lung and bronchus cancer is the leading cause of cancer-related death in both men and women in Ohio. An average of 7,383 deaths occurred annually from lung and bronchus cancer among Ohio residents from 2014-2018. The average annual mortality rate was 54.1 per 100,000 (68.5 per 100,000 for males and 43.4 per 100,000 for females).

Brown County's average annual age-adjusted cancer incidence rate from 2014 to 2018 per 100,000 lies in the 78.6 – 114.2 range, the highest range for counties in Ohio.

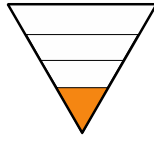
Brown County is a tobacco-producing county. Tobacco growing has not only been a major source of income for farm families but also use of tobacco has also been viewed and considered as a culturally acceptable practice in the county. Statistically, lung cancer is prevalent in Brown County. This could be attributed to the growing of tobacco as a cash crop as well as the long-time practice of using of tobacco.

The community health needs assessment done by the Prevention Research Center for Healthy Neighborhoods in 2014 shows that 37.40 percent of adults in Brown County use tobacco. This percent compares to 21.70 in Ohio and 18.08 in the United States.

**State vs. National Rates: 2013, Male and Female , Ohio**



## Coronary Heart Disease and Diabetes:



Heart disease is the leading cause of death for both men and women. More than half of the deaths due to heart disease in 2009 were among men. Coronary Heart Disease (CHD) is the most common type of heart disease, killing over 370,000 people annually. Every year about 735,000 Americans have a heart attack. Of these, 525,000 are a first heart attack and 210,000 happen in people who have already had a heart attack.

Community Health Status Indicators – U.S. Department of Health and Human Services Centers for Disease Control and Prevention – 2015

## Coronary heart disease deaths (rate per 100,000 persons)

The age adjusted coronary heart disease death rate for Brown County, OH is:

**146.1** (per 100,000)

The above indicator shows the age-adjusted coronary heart disease death rate for Brown County which is 146.1 per 100,000. The U.S. median is 126.7. The healthy people 2020 target is 103.4. According to the Ohio Health Department Chronic Disease Report, 2020, heart disease is the leading cause of death in Ohio and the United States. In 2016 heart disease killed more than 26,000 Ohioans which account for nearly a quarter of all resident deaths in Ohio. Heart disease is caused by a complex set of risk factors that include genetics, environment, clinical risk factors and behaviors such as tobacco use.

Also, individuals are more likely to have heart disease if they have high blood pressure, high cholesterol, or other chronic diseases such as diabetes, kidney disease, are obese, use tobacco, drink alcohol in excess, eat a poor diet or are not physically active. Diabetes, use of tobacco, and poor diet are three of the important health issues for the county and are considered key health issues for the Brown County health assessment.

A study done by the Ohio Department of Health during 2014-2018 indicates that the leading causes of death in Brown County were heart disease, stroke, diabetes, and cancer along with unintentional

injuries such as poisonings, motor vehicle traffic crashes and falls. Another critical health issue as already mentioned, Brown County is in the top ten in the State of Ohio for opioid deaths.

As already mentioned in this report, a lack of access to care presents barriers to good health. Accessibility to health facilities and physicians, the rate of no insurance or under insured, financial hardship, transportation barriers, cultural competency and coverage limitations affect access.

These barriers limit prevention and good management of health care for those living in Brown County. Rates of mortality from heart disease and diabetes can be reduced with improved health care as it relates to accessibility and prevention.

Diabetes affects an estimated 23.6 million people in the United States and is the 7<sup>th</sup> leading cause of death according to the Center for Disease Control. There are different types of diabetes. Type 2 is the most common in adults and accounts for more than 90% of all diabetes cases.

The age-adjusted diabetes death rate for Brown County is 28.4 per 100,000 as shown in the chart below. This compares to the U.S. median of 24.7. Diabetes is a chronic disease which can be managed with weight loss, exercise, and proper medical care. Because accessibility to health care is a key factor in proper management of diabetes, the rate of diabetes for people in Brown County who have limited access to care is higher than the U.S. median.

An important factor to consider for Brown County is that according to the CDC studies, smoking causes type 2 diabetes and in fact, smokers are 30-40% more likely to develop type 2 diabetes than nonsmokers. People with diabetes who smoke are more likely than nonsmokers to have trouble with insulin dosing and with controlling the disease. According to the CDC reports, no matter what type of diabetes you have, smoking makes your diabetes harder to control.

## Mortality Diabetes deaths (rate per 100,000 persons)

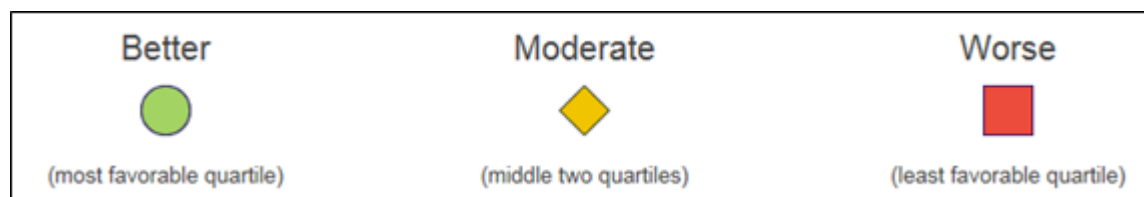
The age adjusted diabetes death rate for Brown County, OH is:

**28.4** (per 100,000)

Moderate

Worse

**Summary Comparison Report:** Provides an “at a glance” summary of how your county compares with peer counties on the full set of primary indicators. Indicators are presented as Better, Moderate, or Worse, in comparison with their peer counties. Peer county values for each indicator were ranked and then divided into quartiles. These comparisons, while visually helpful, do not necessarily represent statistically significant differences between counties.



Indicators in the **Better** category (green circle) fall into the most favorable quartile compared to peers.

Indicators in the **Moderate** category (yellow diamond) fall into the middle two quartiles.

Indicators in the **Worse** category (red square) fall into the most unfavorable quartile.

## **COLLABORATING PARTNERS FOR THE BROWN COUNTY COMMUNITY HEALTH ASSESSMENT**

The Brown County Health Department has collaborated with each of the organizations conducting the assessment surveys to ascertain a broader based understanding from the community. The following list of agencies, organizations and individuals have been an integral part of the assessment process. The variety of methods used to obtain the information reflects creative thinking and an investment of time and energy over the last two to three years.

The Brown County Educational Service Center serves five county school districts. The Brown County Educational Service Center completed a strategic planning process which involved community stakeholders, government officials, the Brown County Chamber, teens, and school administrators. An extensive plan was prepared with action steps which identified Strengths, Weaknesses, Opportunities and Threats in the SWOT analysis. This effort in which the Brown County Health Department was involved was a part of the Brown County Thriving Community's project relating to health and wellness.

The Brown County Educational Service Center completed a survey with over 600 fifth and sixth graders to measure needs both emotionally and physically to develop program objectives and curriculum needs for the academic school year. This program is staffed by ten coordinators which serve the county schools and work directly with students regarding their mental health and health related needs.

The Brown County Board of Mental Health and Addiction Services served as the lead agency for the strategic plan relating to the Opioid and Substance Abuse prevention. The strategic plan was completed in April of 2017 and members who participated represented government officials, faith-based organizations, school officials, community residents, social service agencies, community volunteers, law enforcement, mental health, and counseling services. This process was completed over the course of a year with goals.

The Brown County Community Health Assessment Survey was completed by an advisory committee, key stakeholders, and members of the public.

This assessment was completed utilizing an electronic survey through Survey Monkey and the results were summarized. Participants included the Brown County Commissioners, Brown County Department of Job and Family Services, Ohio Department of Youth Services, Interact for Health, YWCA, Community Action Agency, Brown County Recovery Services, and Brown County Board of Developmental Disabilities, school administrators, parents, village administrators, school improvement supervisors, and concerned citizens.

Through the assessment process key questions were utilized to bring forth the critical issues and accompanying needs.

1. What is important to our community?
2. How is quality of life perceived in our community?
3. What are the top 5 health related concerns and barriers to good health in the county?
4. What assets exist to improve community health?
5. What strengths exist as a Thriving Community and what are the barriers/weaknesses, opportunities and threats that need to be addressed?

The Brown County Health Department continues to collaborate with the necessary community partners to address these emerging needs and to develop long-range plans for improving the health of our county. The diagram below demonstrates the ongoing partnerships that exist to meet the health needs of our community.

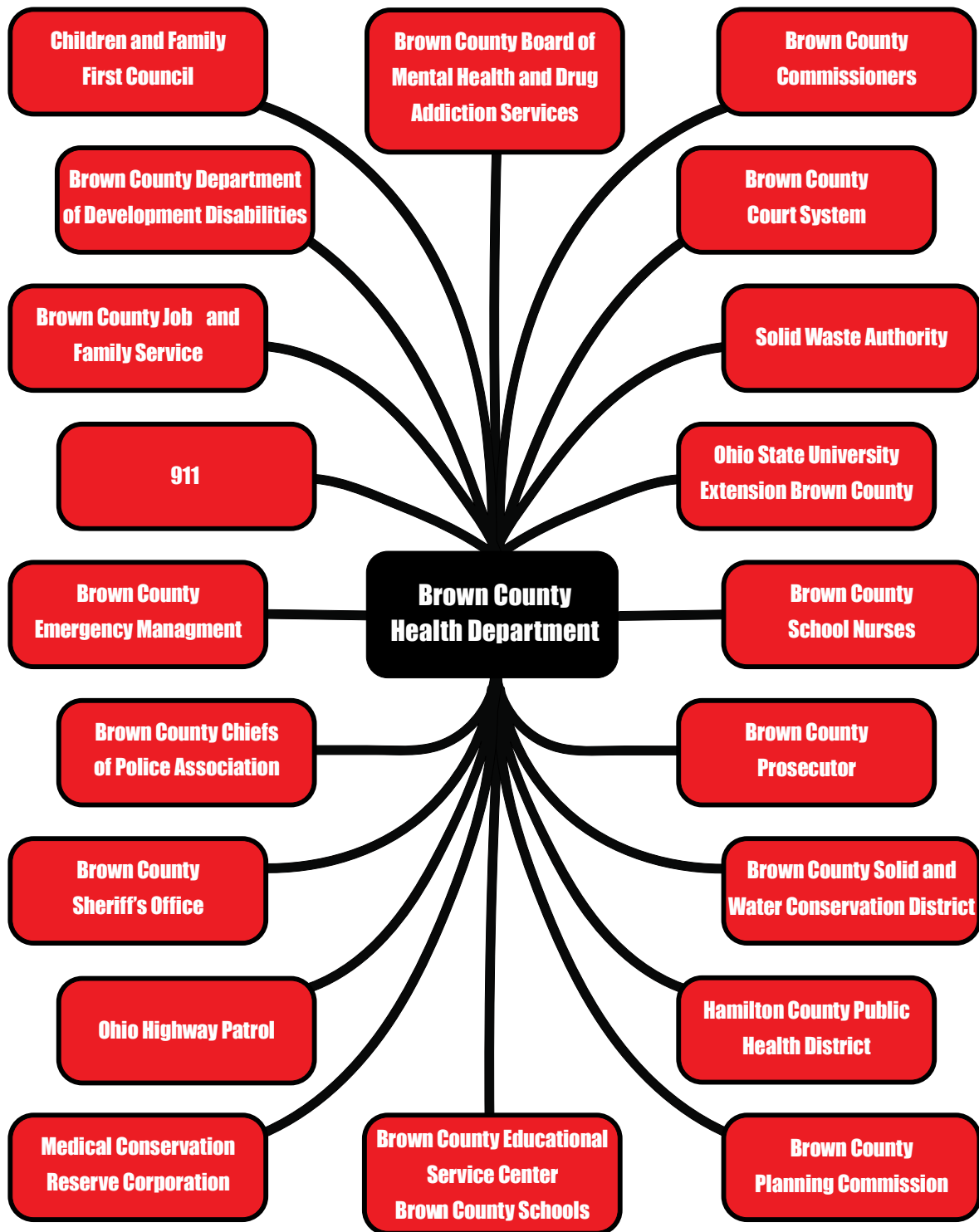


## BROWN COUNTY HEALTH DEPARTMENT PARTNERSHIPS

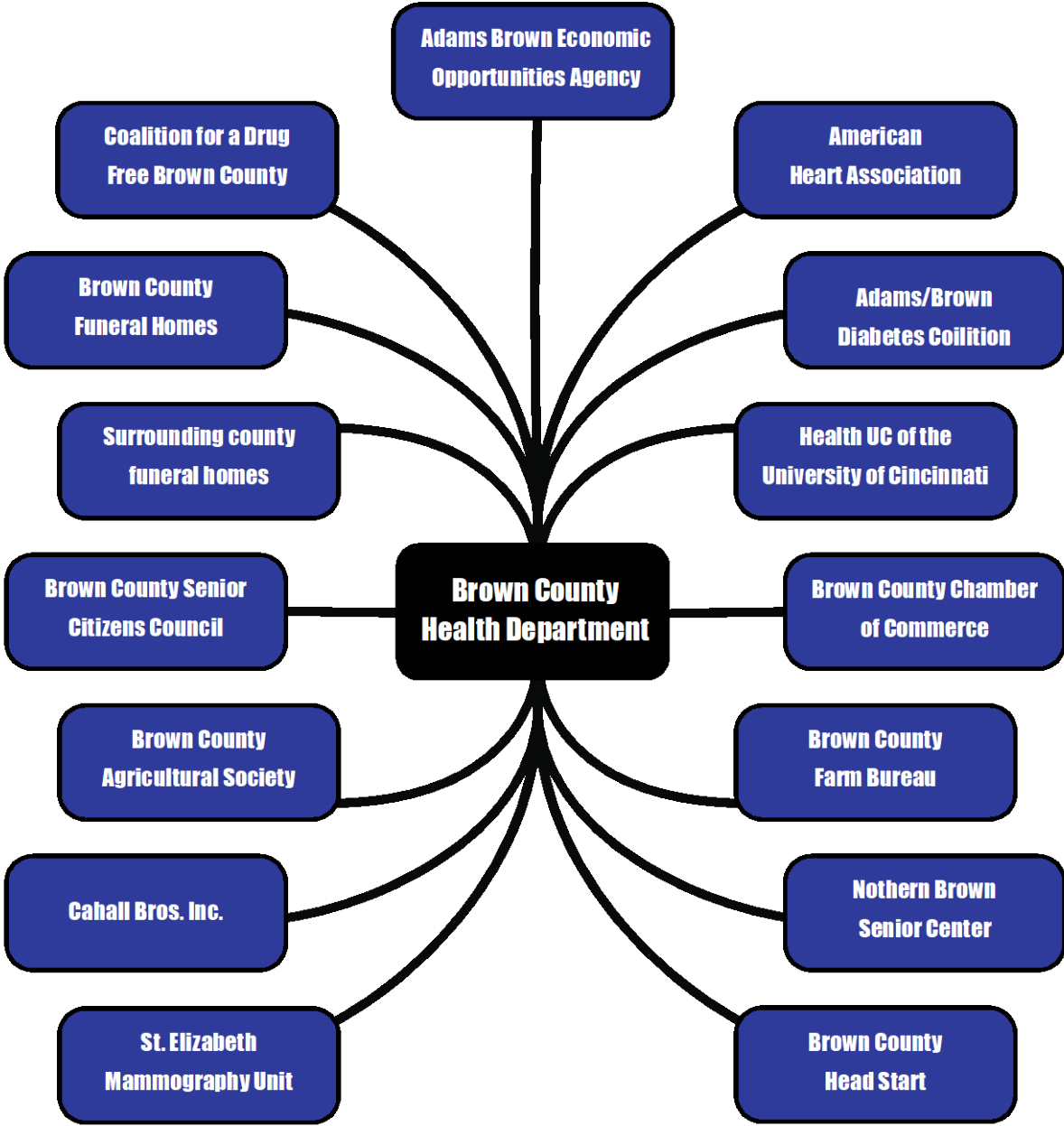
Governmental Collaborators	Community Partners	Educational Outreach
Children and Family First Council	Adams Brown Economic Opportunities Agency	Brown County Health and Wellness Grant
Brown County Educational Service Center Brown County Schools	Coalition for a Drug Free Brown County	Eye Testing to Prevent Blindness
Brown County Job and Family Services	Brown County Funeral Homes	Immunizations
911	Surrounding county funeral homes	Mammography Screenings
Brown County Emergency Management	Brown County Chamber of Commerce	HIV Testing
Brown County Chiefs of Police Association	Brown County Senior Citizens Council	Health and Emergency Preparedness
Brown County Sheriff's Office	Brown County Agricultural Society	Health Programs for 4-H Camp
Ohio Highway Patrol	Cahall Bros. Inc.	Septic System Education
Medical Conservation Reserve Corporation	St. Elizabeth Mammography Unit	Perfect Point
Brown County Court System	American Heart Association	
Brown County Commissioners	Adams/Brown Diabetes Coalition	
Brown County Board of Mental Health and Drug Addiction Services	Brown County Farm Bureau	
Solid Waste Authority	Health UC of the University of Cincinnati	
Ohio State University Extension Brown County	Northern Brown Senior Center	
Brown County School Nurses	Brown County Head Start	
Brown County Prosecutor		
Brown County Soil and Water Conservation District		
Hamilton County Public Health District		
Brown County Planning Commission		
Brown County Department of Developmental Disabilities		

# BROWN COUNTY HEALTH DEPARTMENT COMMUNITY PARTNERS

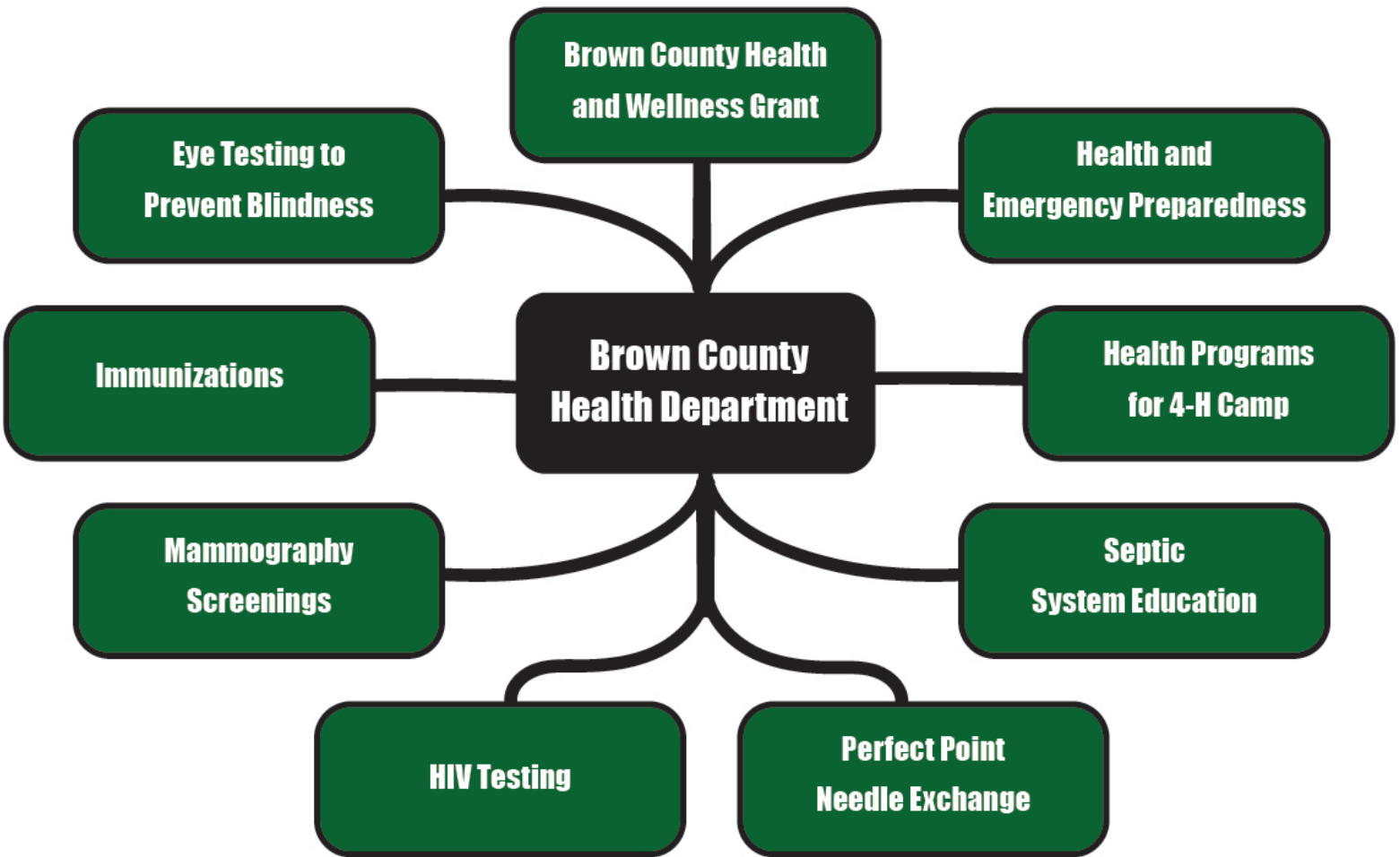
## Governmental Collaborators



# Community Partners



## Educational Outreach



These partnerships extend the efforts of the Brown County Health Department and involve a variety of sectors within our community. The Brown County Health Department will be proactive in sharing assessment information with the stakeholders, those organizations and agencies which conducted assessments and developed strategic plans. We will continue to utilize national and state data to monitor where our community stands relative to health issues as we continue through this accreditation process. As we do long-range planning, we will seek out funding sources, expertise in the fields that address our most critical needs. We will utilize our local strengths but seek out additional support around each of the issues.

Because of the strong partnerships within Brown County, the Health Department will be able to further assess needs and secure human and capital resources. We will continue our prioritization and work with the partnerships in implementing our health initiatives.

## **DATA SOURCES**

Data sources contain current data on Brown County from the Ohio Department of Health, the Center for Disease Control, the University of Wisconsin, the Coalition for a Drug Free Brown County, and other organizations which have conducted surveys and studies on various health issues impacting Brown County. This information and data is filed with the Brown County Health Department and will be further used by the Health Department and the department's key partners in addressing our community needs and implementing health initiatives.

## APPENDIX A

6/14/22, 10:47 AM

Brown County, Ohio | County Health Rankings & Roadmaps

**County Health  
Rankings & Roadmaps**  
Building a Culture of Health, County by County



The 2022 Rankings include deaths attributable to COVID-19 from 2020. See our FAQs for more information on COVID-specific data.

### Brown (BR) 2022 Rankings

Download Ohio Rankings Data

#### County Demographics

	County	State
Population	43,414	11,693,217
% below 18 years of age	22.6%	22.0%
% 65 and older	19.0%	17.9%
% Non-Hispanic Black	0.9%	12.7%
% American Indian & Alaska Native	0.3%	0.3%
% Asian	0.4%	2.6%
% Native Hawaiian/Other Pacific Islander	0.0%	0.1%
% Hispanic	1.2%	4.2%
% Non-Hispanic White	96.1%	78.0%
% not proficient in English **	0%	1%
% Females	50.4%	51.0%
% Rural	76.6%	22.1%

	County	Error Margin	Top U.S. Performers ^	Ohio
<b>Health Outcomes</b>				
<b>Length of Life</b>				
Premature death	10,500	9,400-11,600	5,600	8,700
<b>Quality of Life</b>				
Poor or fair health **	21%	19-24%	15%	18%
Poor physical health days **	4.7	4.3-5.0	3.4	4.2
Poor mental health days **	5.6	5.2-5.9	4.0	5.2
Low birthweight	8%	7-9%	6%	9%
<b>Additional Health Outcomes (not included in overall ranking)</b>				
COVID-19 age-adjusted mortality **	50	34-72	43	87
Life expectancy	74.2	73.4-75.1	80.6	76.5
Premature age-adjusted mortality	510	470-540	290	420
Child mortality	60	40-90	40	60
Infant mortality	8	6-12	4	7
Frequent physical distress **	15%	14-17%	10%	13%
Frequent mental distress **	19%	17-20%	13%	17%
Diabetes prevalence **	11%	10-12%	8%	10%
HIV prevalence	80		38	235
<b>Health Factors</b>				
<b>Health Behaviors</b>				
Adult smoking **	24%	21-28%	15%	22%
Adult obesity **	37%	35-39%	30%	35%
Food environment index	7.6		8.8	6.8
Physical inactivity **	32%	29-36%	23%	28%
Access to exercise opportunities	38%		86%	77%

<https://www.countyhealthrankings.org/app/ohio/2022/county/snapshots/015/print>

1/3

6/14/22, 10:47 AM

## Brown County, Ohio | County Health Rankings &amp; Roadmaps

Excessive drinking **	17%	16-18%	15%	21%
Alcohol-impaired driving deaths	18%	10-28%	10%	33%
Sexually transmitted infections	262.5		161.8	559.4
Teen births	30	26-33	11	21

**Additional Health Behaviors (not included in overall ranking)**

Food insecurity	15%		9%	13%
Limited access to healthy foods	3%		2%	7%
Drug overdose deaths	46	35-59	11	38
Motor vehicle crash deaths	19	14-25	9	10
Insufficient sleep **	40%	38-41%	32%	41%

**Clinical Care**

Uninsured	8%	7-9%	6%	8%
Primary care physicians	4,340:1		1,010:1	1,290:1
Dentists	5,430:1		1,210:1	1,570:1
Mental health providers	610:1		250:1	350:1
Preventable hospital stays	5,012		2,233	4,338
Mammography screening	36%		52%	45%
Flu vaccinations	45%		55%	51%

**Additional Clinical Care (not included in overall ranking)**

Uninsured adults	9%	8-11%	7%	9%
Uninsured children	5%	4-7%	3%	5%
Other primary care providers	1,500:1		580:1	830:1

**Social & Economic Factors**

High school completion	88%	86-90%	94%	91%
Some college	53%	47-59%	74%	66%
Unemployment	8.2%		4.0%	8.1%
Children in poverty	18%	11-24%	9%	17%
Income inequality	5.0	4.1-5.9	3.7	4.6
Children in single-parent households	19%	15-24%	14%	27%
Social associations	6.4		18.1	10.9
Violent crime	67		63	293
Injury deaths	117	102-131	61	96

**Additional Social & Economic Factors (not included in overall ranking)**

High school graduation	86%		96%	83%
Disconnected youth	9%	4-14%	4%	6%
Reading scores	3.0		3.3	3.1
Math scores	3.1		3.4	3.0
School segregation	0.04		0.02	0.30
School funding adequacy	\$490			\$927
Gender pay gap	0.77	0.71-0.82	0.88	0.79
Median household income	\$58,100	\$50,300 to \$65,800	\$75,100	\$60,400
Living wage **	\$33.34			\$37.72
Children eligible for free or reduced price lunch	51%		32%	36%
Residential segregation - Black/white	49		27	69
Residential segregation - non-white/white	31		16	57
Childcare cost burden **	22%		18%	27%
Childcare centers **	6		12	7
Homicides			2	6
Suicides	20	14-27	11	15
Firearm fatalities	16	11-22	8	14
Juvenile arrests	23			33

**Physical Environment**

Air pollution - particulate matter	9.2		5.9	9.0
Drinking water violations	No			
Severe housing problems	12%	10-14%	9%	13%
Driving alone to work	80%	77-84%	72%	82%
Long commute - driving alone	56%	51-61%	16%	31%

**Additional Physical Environment (not included in overall ranking)**

Traffic volume	53			404
Homeownership	73%	70-76%	81%	66%
Severe housing cost burden	11%	8-13%	7%	12%
Broadband access	77%	75-80%	88%	85%

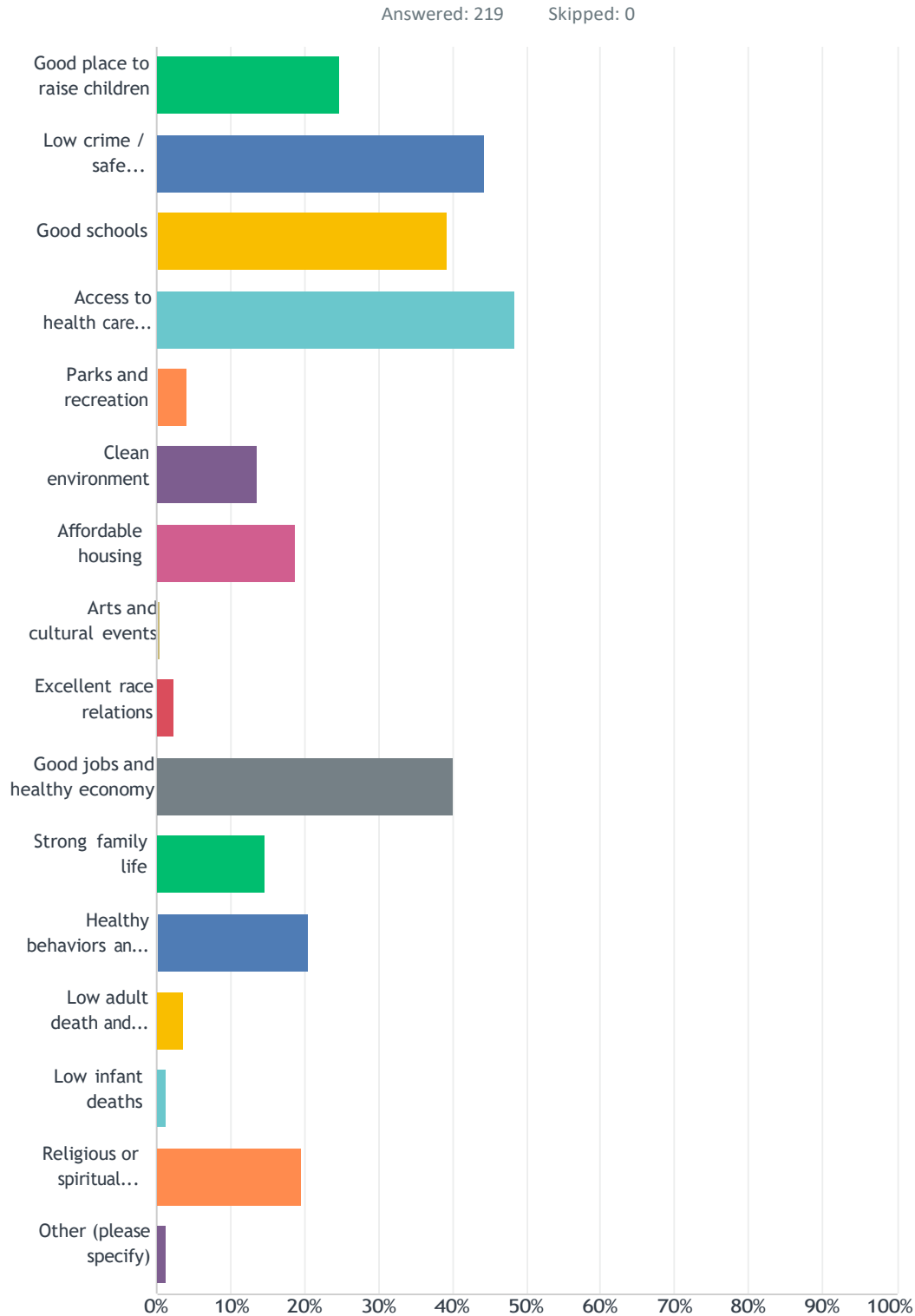
^ 10th/90th percentile, i.e., only 10% are better.

\*\* Data should not be compared with prior years

Note: Blank values reflect unreliable or missing data

## APPENDIX B

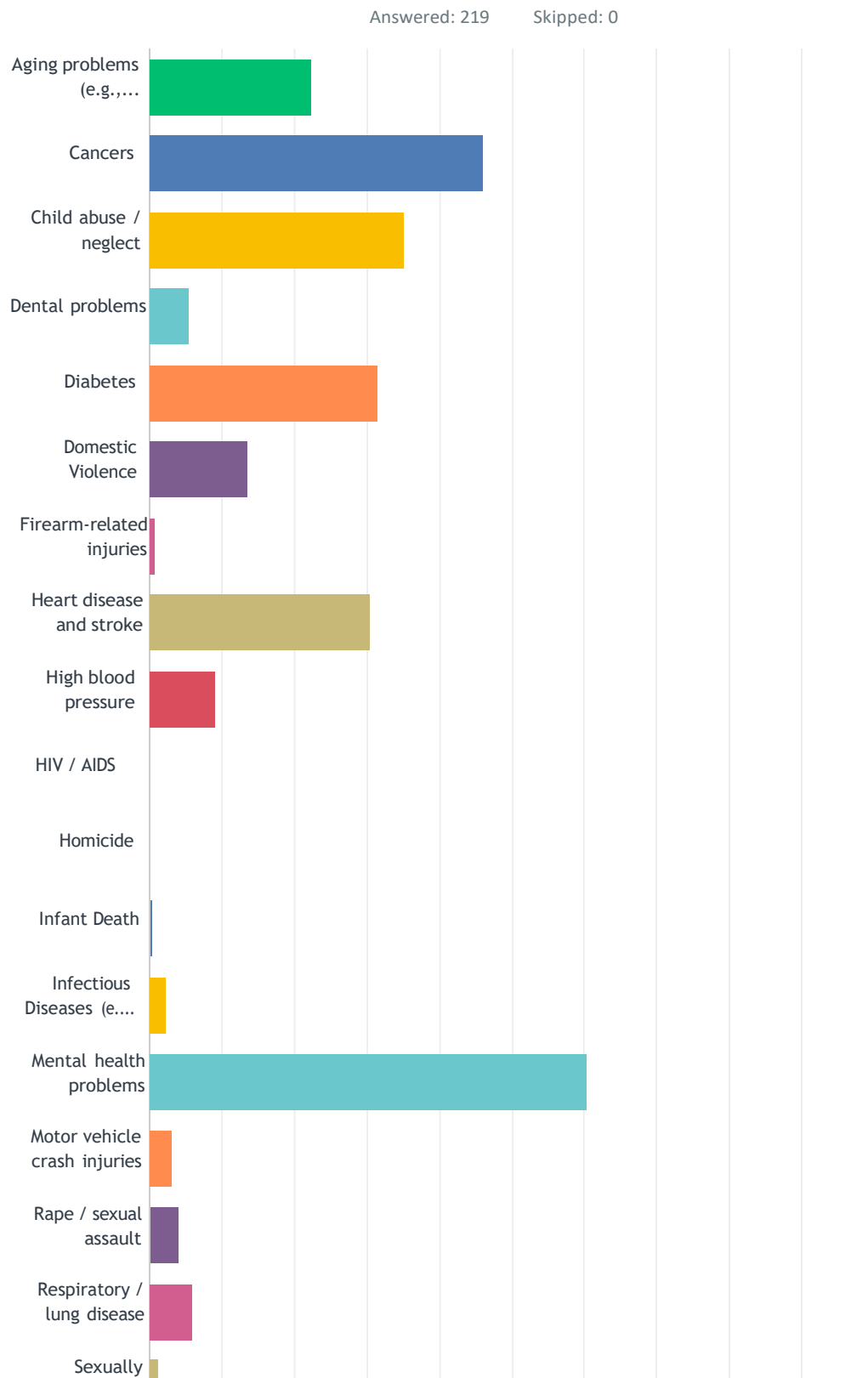
Q1 In the following list, what do you think are the three most important factors for a "Healthy Community?" (Those factors which most improve the quality of life in a community.)

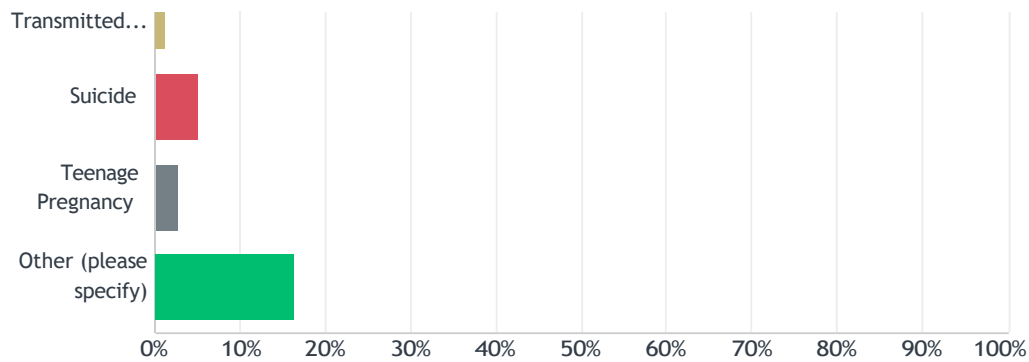




ANSWER CHOICES	RESPONSES	
Good place to raise children	24.66%	54
Low crime / safe neighborhoods	44.29%	97
Good schools	39.27%	86
Access to health care (e.g., family doctor)	48.40%	106
Parks and recreation	4.11%	9
Clean environment	13.70%	30
Affordable housing	18.72%	41
Arts and cultural events	0.46%	1
Excellent race relations	2.28%	5
Good jobs and healthy economy	40.18%	88
Strong family life	14.61%	32
Healthy behaviors and lifestyles	20.55%	45
Low adult death and disease rates	3.65%	8
Low infant deaths	1.37%	3
Religious or spiritual values	19.63%	43
Other (please specify)	1.37%	3
Total Respondents: 219		

Q2 In the following list, what do you think are the three most important "health problems" in our community? (Those problems which have the greatest impact on overall community health.)



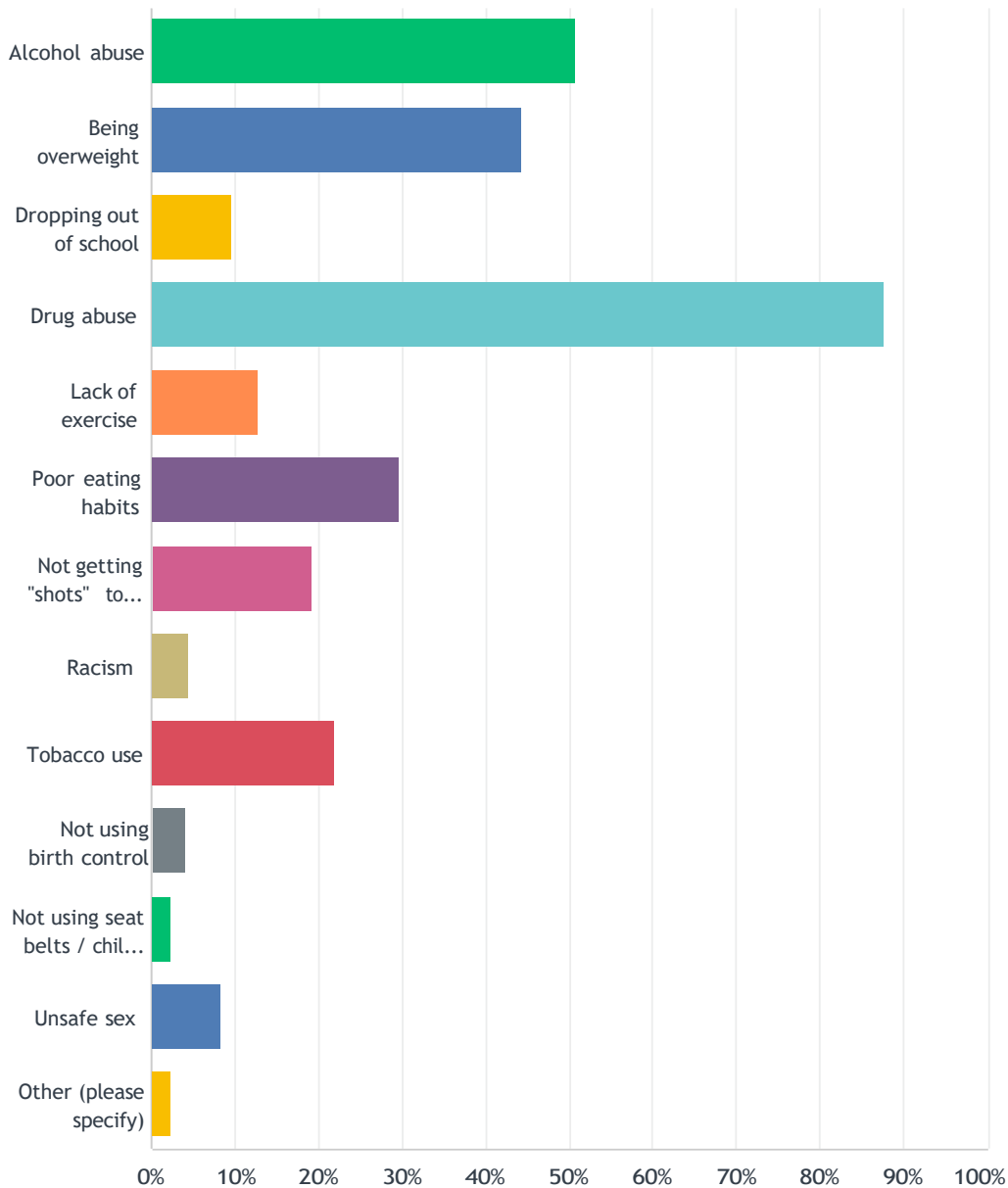


ANSWER CHOICES	RESPONSES	
Aging problems (e.g., arthritis, hearing/vision loss, etc.)	22.37%	49
Cancers	46.12%	101
Child abuse / neglect	35.16%	77
Dental problems	5.48%	12
Diabetes	31.51%	69
Domestic Violence	13.70%	30
Firearm-related injuries	0.91%	2
Heart disease and stroke	30.59%	67
High blood pressure	9.13%	20
HIV / AIDS	0.00%	0
Homicide	0.00%	0
Infant Death	0.46%	1
Infectious Diseases (e.g., hepatitis, TB, etc.)	2.28%	5
Mental health problems	60.27%	132
Motor vehicle crash injuries	3.20%	7
Rape / sexual assault	4.11%	9
Respiratory / lung disease	5.94%	13
Sexually Transmitted Diseases (STDs)	1.37%	3
Suicide	5.02%	11
Teenage Pregnancy	2.74%	6
Other (please specify)	16.44%	36

Total Respondents: 219

Q3 In the following list, what do you think are the three most important "risky behaviors" in our community? (Those behaviors which have the greatest impact on overall community health.)

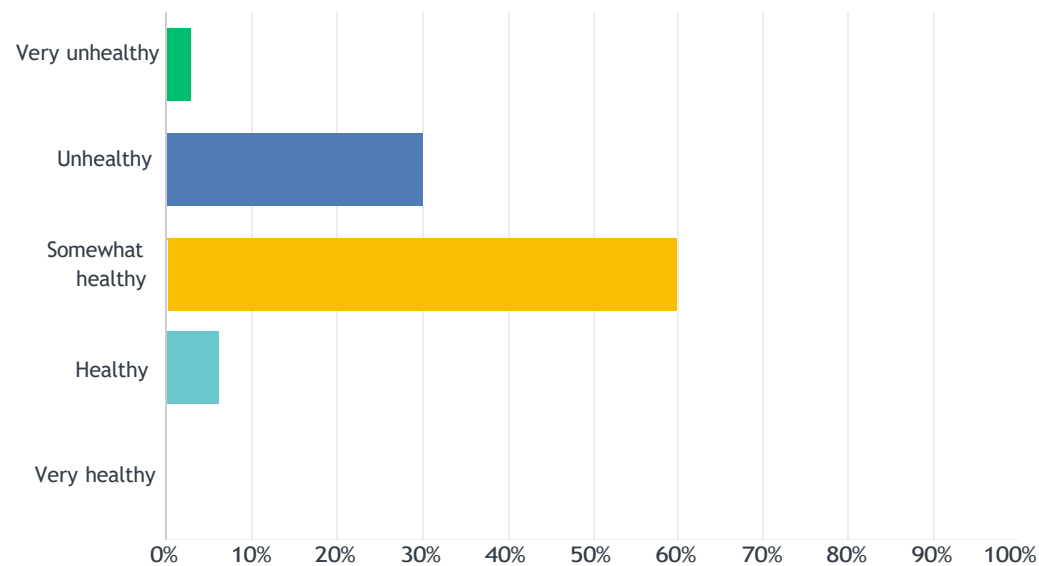
Answered: 219 Skipped: 0



ANSWER CHOICES	RESPONSES	
Alcohol abuse	50.68%	111
Being overweight	44.29%	97
Dropping out of school	9.59%	21
Drug abuse	87.67%	192
Lack of exercise	12.79%	28
Poor eating habits	29.68%	65
Not getting "shots" to prevent disease	19.18%	42
Racism	4.57%	10
Tobacco use	21.92%	48
Not using birth control	4.11%	9
Not using seat belts / child safety seats	2.28%	5
Unsafe sex	8.22%	18
Other (please specify)	2.28%	5
Total Respondents: 219		

# Q4 How would you rate our community as a "Healthy Community?"

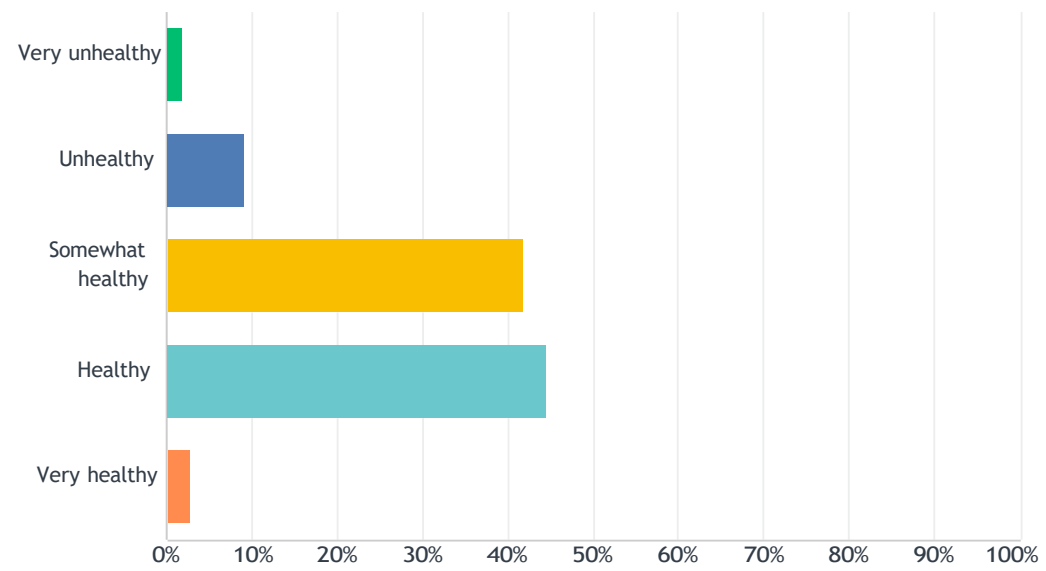
Answered: 217      Skipped: 2



ANSWER CHOICES		RESPONSES	
Very unhealthy		3.23%	7
Unhealthy		30.88%	67
Somewhat healthy		59.45%	129
Healthy		6.45%	14
Very healthy		0.00%	0
TOTAL			217

# Q5 How would you rate your own personal health?

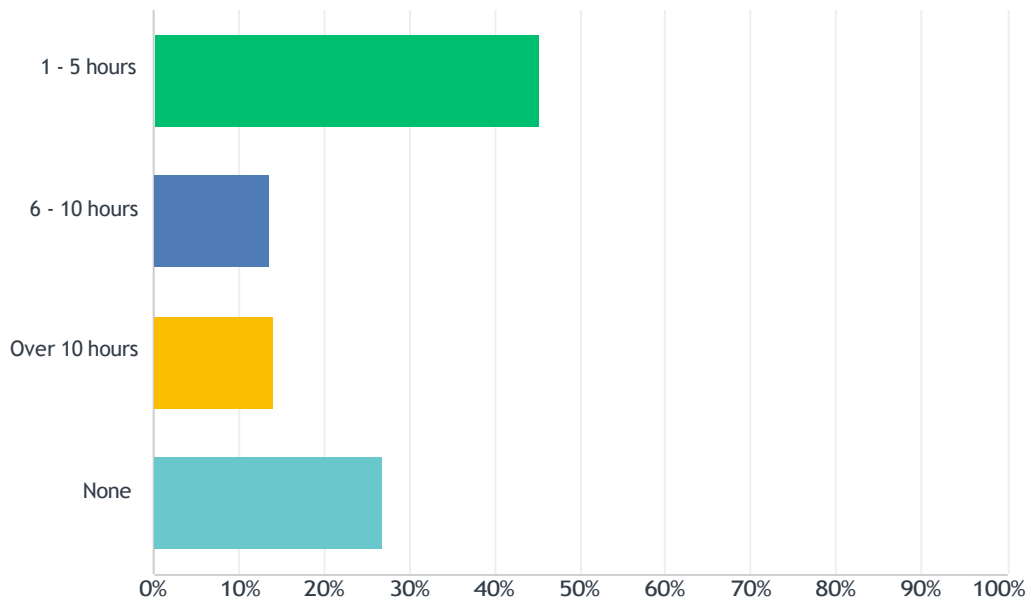
Answered: 218      Skipped: 1



ANSWER CHOICES	RESPONSES	
Very unhealthy	1.83%	4
Unhealthy	9.17%	20
Somewhat healthy	41.74%	91
Healthy	44.50%	97
Very healthy	2.75%	6
TOTAL		218

Q6 Approximately how many hours per month do you volunteer your time to community service? (e.g., schools, voluntary organizations, churches, hospitals, etc.)

Answered: 219      Skipped: 0



ANSWER CHOICES		RESPONSES	
1 - 5 hours		45.21%	99
6 - 10 hours		13.70%	30
Over 10 hours		14.16%	31
None		26.94%	59
TOTAL			219



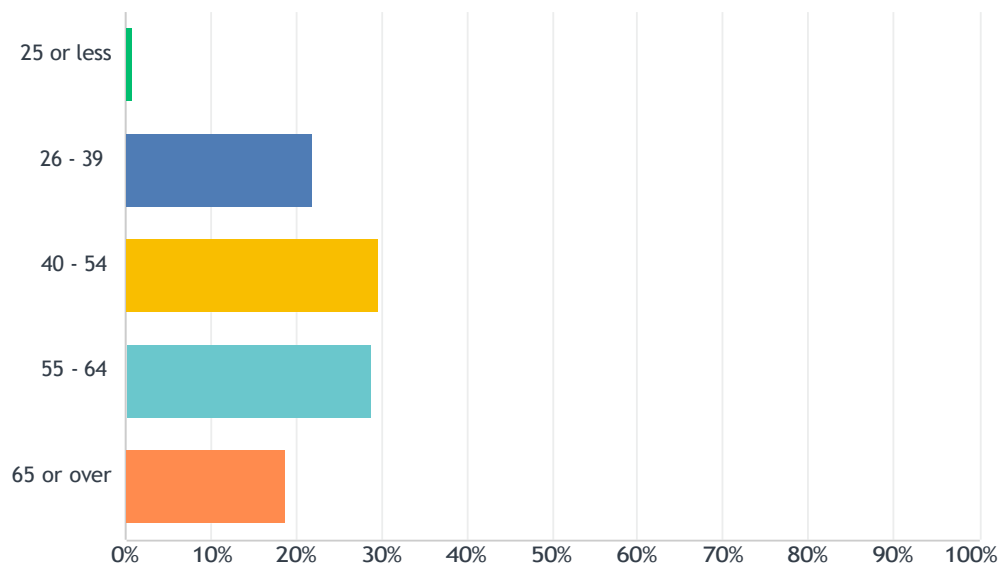
Q7 Please answer questions #7-15 so we can see how different types of people feel about local health issues.

Answered: 219      Skipped: 0

ANSWER CHOICES	RESPONSES
Zip code where you live:	100.00%219

Q8 Age:

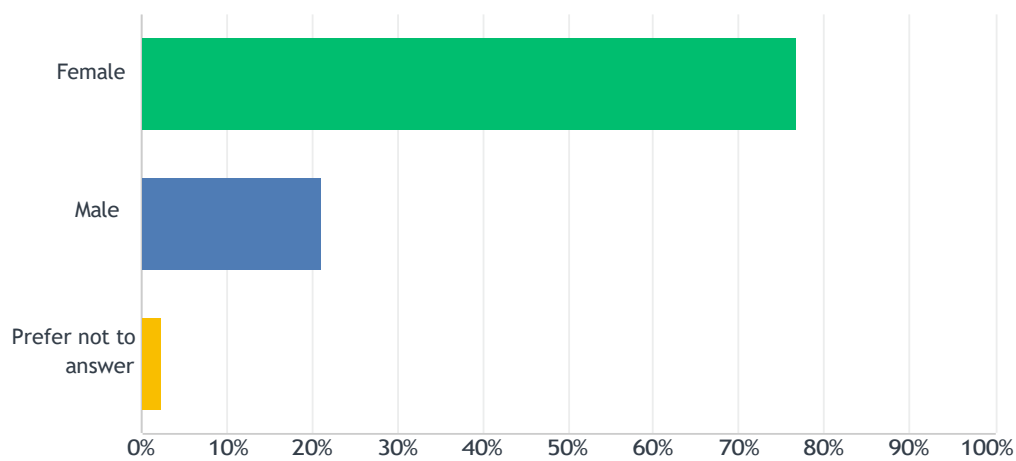
Answered: 219      Skipped: 0



ANSWER CHOICES	RESPONSES	
25 or less	0.91%	2
26 - 39	21.92%	48
40 - 54	29.68%	65
55 - 64	28.77%	63
65 or over	18.72%	41
TOTAL		219

Q9 Sex:

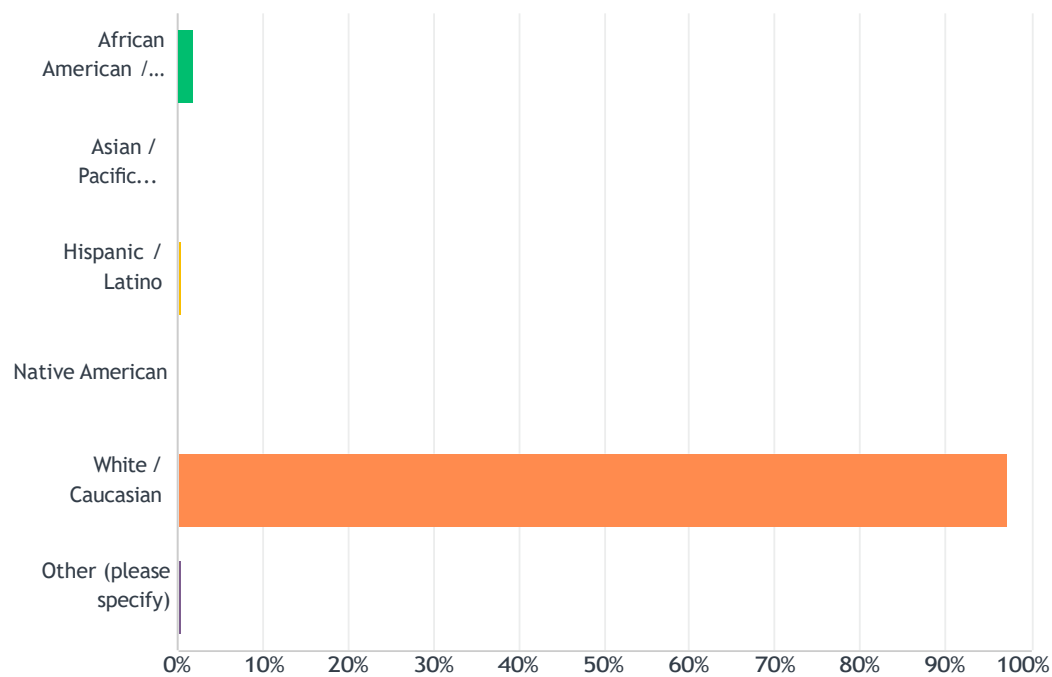
Answered: 219      Skipped: 0



ANSWER CHOICES		RESPONSES	
Female		76.71%	168
Male		21.00%	46
Prefer not to answer		2.28%	5
TOTAL			219

Q10 Ethnic group you most identify with:

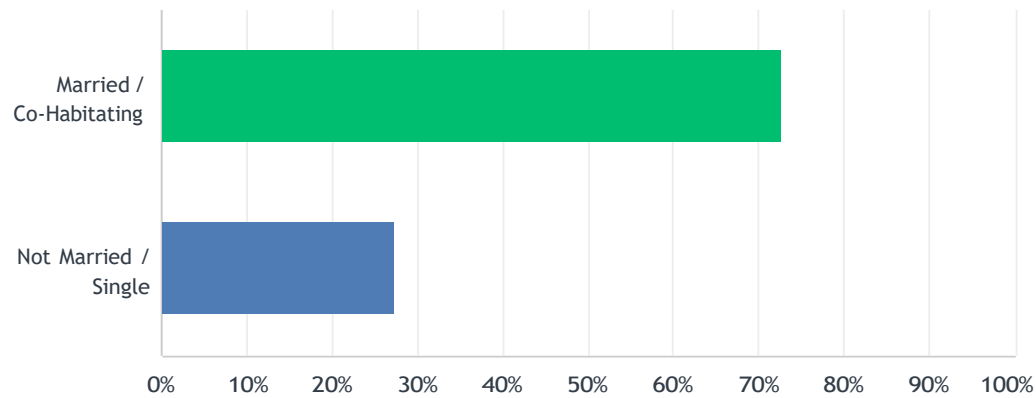
Answered: 219      Skipped: 0



ANSWER CHOICES	RESPONSES	
African American / Black	1.83%	4
Asian / Pacific Islander	0.00%	0
Hispanic / Latino	0.46%	1
Native American	0.00%	0
White / Caucasian	97.26%	213
Other (please specify)	0.46%	1
TOTAL		219

# Q11 Marital Status:

Answered: 219      Skipped: 0

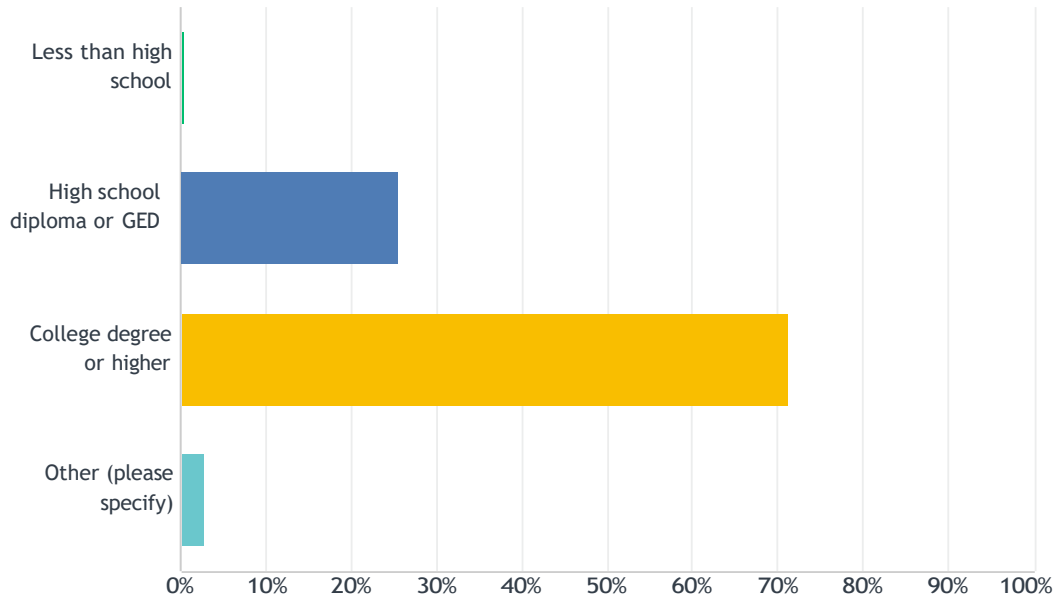


ANSWER CHOICES		RESPONSES	
Married / Co-Habiting		72.60%	159
Not Married / Single		27.40%	60
TOTAL			219

## Q12 Education:

Answered: 219

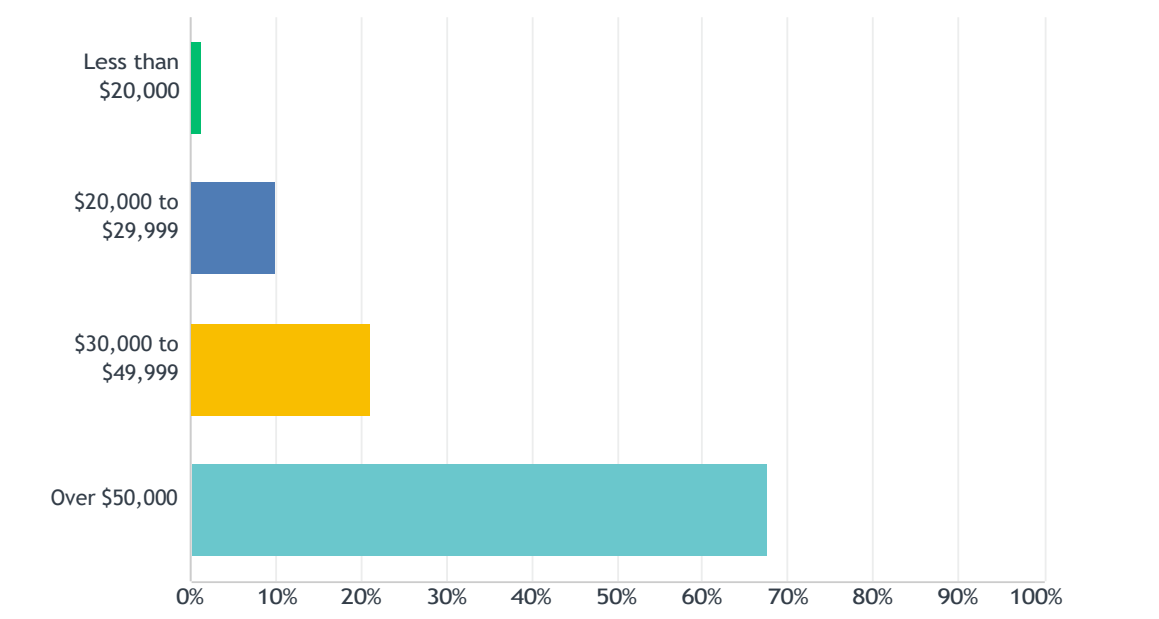
Skipped: 0



ANSWER CHOICES	RESPONSES	
Less than high school	0.46%	1
High school diploma or GED	25.57%	56
College degree or higher	71.23%	156
Other (please specify)	2.74%	6
TOTAL		219

# Q13 Household Income:

Answered: 219      Skipped: 0

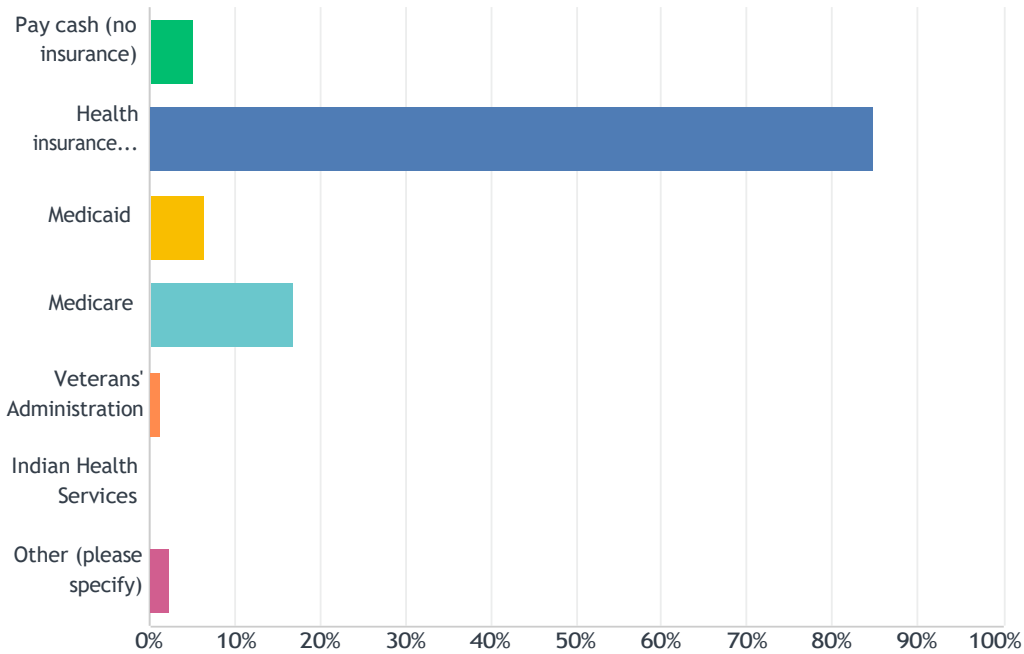


ANSWER CHOICES		RESPONSES	
Less than \$20,000		1.37%	3
\$20,000 to \$29,999		10.05%	22
\$30,000 to \$49,999		21.00%	46
Over \$50,000		67.58%	148
TOTAL			219

## Q14 How do you pay for your health care? (check all that apply)

Answered: 219

Skipped: 0



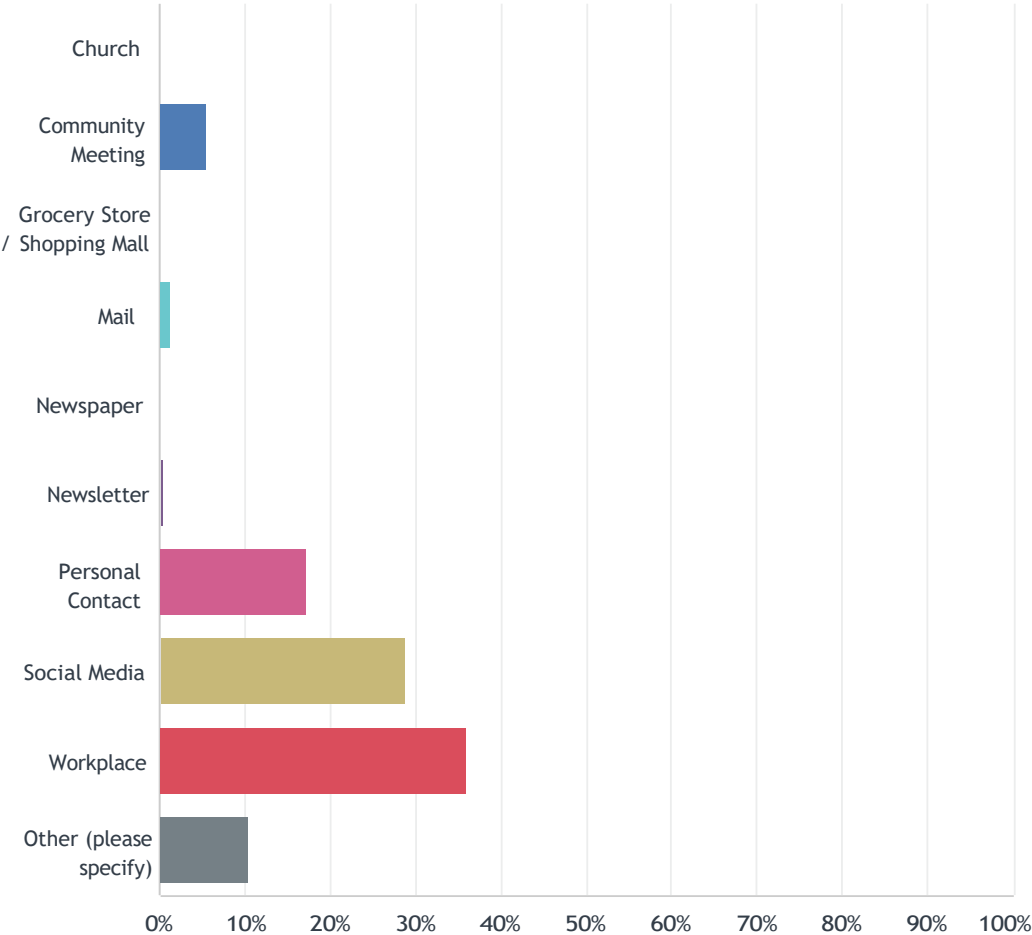
ANSWER CHOICES	RESPONSES	
Pay cash (no insurance)	5.02%	11
Health insurance (e.g., private insurance, Blue Shield, HMO)	84.93%	186
Medicaid	6.39%	14
Medicare	16.89%	37
Veterans' Administration	1.37%	3
Indian Health Services	0.00%	0
Other (please specify)	2.28%	5

Total Respondents: 219



# Q15 Where did you hear about this survey?

Answered: 219      Skipped: 0



ANSWER CHOICES	RESPONSES	
Church	0.00%	0
Community Meeting	5.48%	12
Grocery Store / Shopping Mall	0.00%	0
Mail	1.37%	3
Newspaper	0.00%	0
Newsletter	0.46%	1
Personal Contact	17.35%	38
Social Media	28.77%	63
Workplace	36.07%	79
Other (please specify)	10.50%	23
TOTAL		219

## Q16 I would like more information about this community project (optional):

Answered: 22    Skipped: 197

ANSWER CHOICES	RESPONSES	
Name	90.91%	20
Company	40.91%	9
Address	90.91%	20
Address 2	4.55%	1
City/Town	90.91%	20
State/Province	90.91%	20
ZIP/Postal Code	90.91%	20
Country	0.00%	0
Email Address	90.91%	20