DISCUSSION DRAFT
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# Memorial Health System

## Community Health Needs Assessment

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# I. Executive Summary

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## A. Purpose

The purpose of this report was to collect and analyze relevant data to prioritize community health needs within Washington County, Ohio, and to help Memorial Health System (MHS), the Community Health Council, and their members develop and implement action plans to meet those needs and improve current programs and services. This Community Health Needs Assessment is a joint assessment completed by Marietta Memorial Hospital (MMH) and Selby General Hospital (SGH), both located in Marietta, Ohio.

## B. Data Sources

This report focuses on Washington County, Ohio, as a source for data collection. MHS serves a wider service area, but MMH and SGH are located in Washington County, and, due to the homogeneous nature of the community, it is representative of the wider region. As well, state-provided data for Ohio was widely available and produced in a timely manner for this report. Multiple data sources with varied data collection time periods and methodologies were used to construct this report. All were chosen based on data integrity, sponsoring agency, and repetition of study. Every effort was made to cross-reference data points and integrate findings in this report. All sources are listed at the end of this document.

## C. Key Findings

» Washington County has a significant senior population.

» The per capita income in Washington County is lower than the state median, and 15% of the overall county population is below the poverty line.

» Of the children in Washington County, 21% live in poverty.

» In the county, 10.8% of the residents lack health insurance.

» Of the children in Washington County, 25.5% reside in single-parent households.

» There is a higher than average number of adults residing in Washington County who do not have adequate social or emotional support.

» There is a higher than average number of grandparents who serve as primary caregivers to children in Washington County.

» There is a higher percentage of smokers in Washington County than in the state or nation.

» Washington County has a higher rate of obesity than the state or nation

» Washington County has a lower rate of individuals who walk or ride a bicycle to work and less overall physical activity than the state or nation.

» The county has a higher percentage of the population that self-reports a poor or fair health status compared to individuals across the state or nation.

» The mortality rates for unintentional injury, lung disease, and stroke are higher in Washington County than the state or national average.

- Washington County has higher rates of heart disease, diabetes, and high blood pressure than the state or nation.
- Breast cancer and lung cancer rates are higher in Washington County than for the state.
- Primary care provider rates for Washington County are similar to the state and nation.
- There are fewer dentists per capita in Washington County than in the state or nation. A significant percentage of Washington County residents report not having a recent dental examination.
- There is a severe deficit of mental health providers in Washington County compared to the state and nation on a per population basis.
- Of MHS's medical staff members, 28% are at or above age 55.
- Cost of care, inadequate insurance coverage, or lack of insurance coverage are key drivers that prevent Washington County residents from accessing health services. Other key drivers are a lack of knowledge or information about services/resources or unavailability of those services/resources.
- Community members rate substance abuse treatment, substance abuse prevention, the economy, sexual health/education, and mental health treatment as the weakest areas of community health in Washington County.
- Substance abuse, unhealthy lifestyles, and chronic disease were identified as the top three areas where more health information was needed within Washington County.

# II. Community Profile

# II. Community Profile

MHS is located in Marietta, Washington County, on the confluence of the Ohio and Muskingum Rivers in the southeastern part of Ohio. Marietta is a rural community that is approximately 120 miles southeast of the state capital of Columbus.

The 2016 population is estimated to be 60,610 (United States Census Bureau, 2016). This is a 1.2% decrease in population from 2015 (United States Census Bureau, 2015).

The median age in 2015 was 43.6 years. The population age 18 years or older was 48,964 (or 79.8% of the population). The population age 65 or older was 11,492 (or 18.7%).

**2015 Population by Age**
(United States Census Bureau, 2015)

| | Population Estimate | Percentage of Population |
|---|---|---|
| Under 5 years | 3,005 | 4.9% |
| 5 to 9 years | 3,660 | 6.0% |
| 10 to 14 years | 3,396 | 5.5% |
| 15 to 19 years | 4,119 | 6.7% |
| 20 to 24 years | 3,844 | 6.3% |
| 25 to 34 years | 6,615 | 10.8% |
| 35 to 44 years | 7,143 | 11.6% |
| 45 to 54 years | 8,899 | 14.5% |
| 55 to 59 years | 5,119 | 8.3% |
| 60 to 64 years | 4,059 | 6.6% |
| 65 to 74 years | 6,386 | 10.4% |
| 75 to 84 years | 3,818 | 6.2% |
| 85 years and over | 1,288 | 2.1% |
| **Total Population** | **61,351** | **99.9%** |

**2015 Population by Gender**
(United States Census Bureau, 2015)

| | Total Population | | Population Age 18+ | | Population Age 65+ | |
|---|---|---|---|---|---|---|
| | Population Estimate | Percent-age | Population Estimate | Percent-age | Population Estimate | Percent-age |
| Male | 30,112 | 49.1% | 23,745 | 48.5% | 5,036 | 43.8% |
| Female | 31,239 | 50.9% | 25,219 | 51.5% | 6,456 | 56.2% |
| **Total Population** | **61,351** | **100.0%** | **48,964** | **100.0%** | **11,492** | **100.0%** |

Washington County has a low degree of ethnic diversity. In 2015, 98.5% of the population identified as belonging to a single race (United States Census Bureau, 2015).

**2015 Population by Ethnicity**
(United States Census Bureau, 2015)

| | Total Population | Percentage |
|---|---|---|
| White | 59,048 | 96.2% |
| Black or African American | 683 | 1.1% |
| Asian | 415 | 0.7% |
| American Indian and Alaska Native | 100 | 0.2% |
| Native Hawaiian and Other Pacific Islander | 25 | 0.0% |
| Some other race | 152 | 0.2% |
| Multiethnic | 928 | 1.5% |
| | **61,351** | **100.0%** |

*NOTE:* Figures may not be exact due to rounding.

**2015 Hispanic versus Non-Hispanic Population**
(United States Census Bureau, 2015)

| | Total Population | Percentage |
|---|---|---|
| Not Hispanic or Latino | 60,736 | 99.0% |
| » Mexican | 201 | 0.3% |
| » Puerto Rican | 37 | 0.1% |
| » Cuban | 152 | 0.2% |
| » Other Hispanic or Latino | 225 | 0.4% |
| Hispanic or Latino (of any race) | 615 | 1.0% |
| | **61,351** | **100.0%** |

*NOTE:* Figures may not be exact due to rounding.

The county had a total of 28,124 housing units available in 2016 (United States Census Bureau, 2015). The reported citizen voting age population was 48,579, reflecting a recorded adult noncitizen population of less than 0.8%.

**2015 Total Adult Population versus Citizen Adult Population**
(United States Census Bureau, 2015)

| | Total Population Age 18+ | | Citizen Voting Age 18+ Population | |
|---|---|---|---|---|
| | **Population Estimate** | **Percentage** | **Population Estimate** | **Percentage** |
| Male | 23,745 | 48.5% | 23,483 | 48.3% |
| Female | 25,219 | 51.5% | 25,096 | 51.7% |
| **Total Population** | **48,964** | **100.0%** | **48,579** | **100.0%** |

Median household income for Washington County in 2015 was reported as $44,697 compared to $51,086 for Ohio overall. Compared to 14.8% statewide, 15% of the overall county population is estimated to be below the poverty level (Ohio Department of Job and Family Services, March 2017).

As of December 2015, there were 28,300 individuals in the Washington County labor force, and 26,500 were employed (Ohio Department of Job and Family Services, March 2017). Industry in Washington County consists primarily of chemical factories along the Ohio River, the oil and gas industry, and agriculture. Per the Marietta Chamber of Commerce, the top employers in Washington County as of April 2015 are Marietta Memorial Hospital (2,558), Peoples Bank (787), Pioneer Pipe (588), Thermo Fisher (480), Kraton Polymers (443), Marietta College (322), Solvay Advanced Polymers (290), Eramet (210), Washington State Community College (160), Wal-Mart (155), and RFJ International (152) (Memorial Health System Strecker Cancer Center, December 2016).

Unemployment as of December 2015 was reported to be 1,800 individuals at a non-adjusted unemployment rate of 6.5% with an average weekly unemployment benefit of $392. The average unemployment duration is 14.1 weeks. A number of state and federal workforce programs are available to provide workforce training, job opportunity matching, and financial assistance to community members, including youth, adults, and qualified veterans (Ohio Department of Job and Family Services, March 2017).

The Federal Poverty Level is determined annually by the Department of Health & Human Services based on the national poverty level, and people between 100% and 400% of the level are eligible for federal and state financial assistance. Poverty is considered a key driver of health status. This indicator is important because poverty creates barriers to accessing vital services, such as health services, healthy food, and other necessities, which can contribute to a poor health status.

**People Living below the Federal Poverty Level**
(United States Census Bureau, 2015)

| | Median Household Income | Total Percentage in Poverty | Children in Poverty | Families in Poverty | 65 Years+ |
|---|---|---|---|---|---|
| Washington County | $43,509 | 16.4% | 21.1% | 10.8% | 10.0% |
| Ohio | $49,429 | 15.8% | 22.8% | 11.5% | 8.0% |
| United States | $53,889 | 15.5% | 21.7% | 11.3% | 9.4% |

Educational attainment is one of the strongest predictors of health, linking higher educational attainment to more positive health outcomes. While the percentage of Washington County high school graduates is similar to that of Ohio, there are significantly less county residents receiving a bachelor degree compared to the state. Washington County's graduation rate is approximately 0.4% less than the graduation rate of Ohio. Both the county and state graduation rates are higher than the national average.

**Educational Attainment**
(United States Census Bureau, 2015)

| | High School Graduate or Higher | Bachelor's Degree or Higher |
|---|---|---|
| Washington County | 89.6% | 17.5% |
| Ohio | 89.1% | 26.1% |

**High School Graduation Rate**
(United States Department of Education, n.d.)

| | Total Student Cohort | Estimated Number of Diplomas Issued | Cohort Graduation Rate |
|---|---|---|---|
| Washington County | 697 | 617 | 88.5% |
| Ohio | 121,516 | 107,999 | 88.9% |
| United States | 2,127,886 | 2,635,290 | 84.3% |

Special populations are important to identify in the community because they are often more vulnerable to health inequities and disparities. The "non-English-speaking persons" indicator reports the percentage of the population age five and older who speak a language other than English at home and speak English less than "very well."

Veterans refers to civilians who served on active duty for any branch of the armed forces of the United States. Veterans are more likely to have lower-quality healthcare and poorer health outcomes.

The “persons without high school diploma” indicator reports the percentage of the population age 25 or older without a high school diploma (or equivalency) or higher. Research shows that individuals with less educational attainment have less positive health outcomes.

The “persons without health insurance” indicator reports the percentage of adults age 18 to 65 without health insurance coverage. The lack of health insurance is considered a key driver of health status because lack of insurance is a primary barrier to healthcare access, including preventive and regular primary care, specialty care, and other health services, which can contribute to a poor health status.

The “children in single-parent households” indicator refers to the percentage of all children in family households who live in households headed by a single parent (male or female with no spouse present). Research shows that children in single-parent households are less likely to have access to good healthcare and more likely to have emotional or behavioral difficulties as compared to children in nuclear families (two heads of household who are married and have custody of the children).

**Special Populations**
(United States Census Bureau, 2015)

| | Washington County | | Ohio | |
|---|---|---|---|---|
| | **Number** | **Percent-age** | **Number** | **Percent-age** |
| Non-English-Speaking Persons | 304 | 0.52% | 256,200 | 2.36% |
| Veterans | 5,372 | 10.97% | 834,358 | 9.40% |
| Persons without High School Diploma | 4,746 | 10.94% | 869,789 | 11.18% |
| Persons without Health Insurance | 6,552 | 10.78% | 1,237,272 | 10.87% |
| Children in Single-Parent Households | 3,094 | 25.50% | Data not available | 35.00% |

# III. Health of Community

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The overall health of a community and its individuals can be measured through several contributing factors. This section of the Community Health Needs Assessment evaluates key indicators for Washington County that contribute to the overall health and wellness of its population.

## A. Quality of Life

Quality of Life (QOL) is a construct that "connotes an overall sense of well-being when applied to an individual" and a "supportive environment when applied to a community" (Moriarty, 1996). While some dimensions of QOL can be quantified using indicators, research has shown QOL to be related to determinants of health and community well-being. Other valid dimensions of QOL include perceptions of community residents about aspects of their neighborhoods and communities that either enhance or diminish their quality of life.

### 1. Lack of Social or Emotional Support

This indicator reports the percentage of adults age 18 and older who self-report that they receive insufficient social and emotional support all or most of the time. This indicator is relevant because social and emotional support is critical for navigating the challenges of daily life, as well as for good mental health. Social and emotional support is also linked to educational achievement and economic stability.

**Lack of Social or Emotional Support**
(Centers for Disease Control and Prevention, 2006–2012)

| | Total Population Age 18+ | Estimated Population without Adequate Social/ Emotional Support | Crude Percentage | Age-Adjusted Percentage |
|---|---|---|---|---|
| Washington County | 48,860 | 10,456 | 21.4% | 23% |
| Ohio | 8,781,360 | 1,721,147 | 19.6% | 19.5% |
| United States | 232,556,016 | 48,104,656 | 20.7% | 20.7% |

### 2. Violent Crime

This indicator reports the rate of violent crime offenses reported by law enforcement per 100,000 residents. Violent crime includes homicide, rape, robbery, and aggravated assault. This indicator is relevant because it assesses community safety.

**Violent Crime**
(Federal Bureau of Investigation, 2010–2012)

| | Total Population | Violent Crimes | Violent Crime Rate per 100,000 Population |
|---|---|---|---|
| Washington County | 61,235 | 46 | 75.7 |
| Ohio | 10,917,635 | 34,148 | 312.8 |
| United States | 306,859,354 | 1,213,859 | 395.5 |

## 3. Recreation and Fitness Facility Access

This indicator reports the number per 100,000 population of recreation and fitness facilities as defined by North American Industry Classification System (NAICS) Code 713940. This indicator is relevant because access to recreation and fitness facilities encourages physical activity and other healthy behaviors, which reduce the risk of chronic disease.

**Recreation and Fitness Facility Access**
(United States Census Bureau)

| | Total Population | Number of Establishments | Establishments, Rate per 100,000 Population |
|---|---|---|---|
| Washington County | 61,778 | 7 | 11.33 |
| Ohio | 11,536,504 | 1,099 | 9.5 |
| United States | 312,732,537 | 30,393 | 9.7 |

## 4. Grandparents as Caregivers

This indicator reports the percentage of grandparents who are living with and are responsible for their own grandchildren under the age of 18. It is important because caregivers are at higher risk of stress-related health issues, financial burden, and other negative factors.

**Grandparents as Caregivers**
(Marietta Memorial Hospital, 2014)

| | Percentage of Grandparents as Caregivers |
|---|---|
| Washington County | 49.9% |
| Ohio | 46.9% |
| United States | 39.8% |

## B. Behavioral Risk Factors

Risk factors in this category include behaviors that are believed to cause, or to be contributing factors to, injuries, disease, and death during youth and adolescence and be significant causes of mortality in later life.

### 1. Substance Use and Abuse

Substance abuse refers to the misuse of harmful psychoactive substances including, but not limited to tobacco, alcohol, and illicit drugs. Public health policies and interventions on the local and national level can address patterns of use, accessibility of the substances, and ultimate rehabilitation of the health of affected individuals. Initial use of substances is considered preventable.

**Tobacco Usage of Current Smokers**
(Centers for Disease Control and Prevention, 2006–2012)

| | Total Population Age 18+ | Total Adults Regularly Smoking Cigarettes | Percentage Population Smoking Cigarettes (crude) | Percentage Population Smoking Cigarettes (age-adjusted) |
|---|---|---|---|---|
| Washington County | 48,860 | 9,723 | 19.9% | 23.3% |
| Ohio | 8,781,360 | 1,861,648 | 21.2% | 21.7% |
| United States | 232,556,016 | 41,491,223 | 17.8% | 18.1% |

This indicator reports the percentage of adults age 18 and older who self-report smoking cigarettes, and it is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease.

**Alcohol Consumption**
(Centers for Disease Control and Prevention, 2006–2012)

| | Total Population Age 18+ | Estimated Adults Drinking Excessively | Percentage Population Drinking Excessively (crude) | Percentage Population Drinking Excessively (age-adjusted) |
|---|---|---|---|---|
| Washington County | 48,860 | 5,668 | 11.6% | 13.4% |
| Ohio | 8,781,360 | 1,536,738 | 17.5% | 18.4% |
| United States | 232,556,016 | 38,248,349 | 16.4% | 16.9% |

This indicator reports the percentage of adults age 18 and older who self-report heavy alcohol consumption (defined as more than two drinks per day on average for men and one drink per day on average for women). This indicator is relevant because current behaviors are determinants of

future health, and this indicator may illustrate a cause of significant health issues, such as cirrhosis, cancers, and untreated mental and behavioral health needs.

**Drug Overdoses**

| | Number of Drug Overdose Deaths |
|---|---|
| Washington County (University of Wisconsin Population Health Institute, 2014) | 26 |
| Ohio (Ohio Department of Health, 2015) | 3,050 |
| United States (Ohio Department of Health, 2015) | 47,055 |

Drug overdose deaths are the number of deaths due to drug poisoning per 100,000 people. These include any accidental, intentional, and undetermined poisoning by and exposure to a number of drugs. The United States is currently experiencing an epidemic of drug overdose deaths, particularly by opioid pain relievers, heroin, and fentanyl. This indicator is important because it is the leading cause of injury-related death in Ohio.

## 2. Fruit and Vegetable Consumption

In the reported area, an estimated 35,736 or 74% of adults over the age of 18 are consuming less than five servings of fruits and vegetables each day. This indicator is relevant because current behaviors are determinants of future health, and unhealthy eating habits may cause significant health issues, such as obesity and diabetes.

**Fruit and Vegetable Consumption**
(Centers for Disease Control and Prevention, 2005–2009)

| | Total Population Over Age 18 | Total Adults with Inadequate Fruit/Vegetable Consumption | Percentage Adults with Inadequate Fruit/Vegetable Consumption |
|---|---|---|---|
| Washington County | 48,292 | 35,736 | 74.0% |
| Ohio | 8,750,969 | 6,869,511 | 78.5% |
| United States | 227,279,010 | 171,972,118 | 75.7% |

## 3. Adult Obesity

Of adults age 20 and older, 32.8% self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese) in the report area. This indicator is important because excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues, such as cardiovascular diseases, diabetes, and high blood pressure.

**Adult Obesity**
(Centers for Disease Control and Prevention, 2012)

| | Total Population Age 20+ | Adults with BMI >30.0 (obese) | Percentage Adults with BMI >30.0 (obese) |
|---|---|---|---|
| Washington County | 47,271 | 15,694 | 32.8% |
| Ohio | 8,561,233 | 2,609,274 | 30.1% |
| United States | 231,417,834 | 63,336,403 | 27.1% |

## 4. Adult Overweight

Of adults age 18 and older, 26.8% self-report that they have a Body Mass Index (BMI) between 25.0 and 30.0 (overweight) in the report area. Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues, such as cardiovascular diseases, diabetes, and high blood pressure.

**Adult Overweight**
(Centers for Disease Control and Prevention, 2012)

| | Survey Population Adults Age 18+ | Total Adults Overweight | Percentage Adults Overweight |
|---|---|---|---|
| Washington County | 42,910 | 11,521 | 26.8% |
| Ohio | 8,300,105 | 2,971,608 | 35.8% |
| United States | 224,991,207 | 80,499,532 | 35.8% |

## 5. Walking or Biking to Work

This indicator reports the percentage of the population that commutes to work by either walking or riding a bicycle. It is important because physical activity is advantageous for both physical and mental health, as opposed to the sedentary activity of driving a car.

**Walking or Biking to Work**
(United States Census Bureau, 2010–2014)

| | Population Age 16+ | Population Walking or Biking to Work | Percentage Walking or Biking to Work |
|---|---|---|---|
| Washington County | 25,354 | 623 | 2.46% |
| Ohio | 5,199,477 | 134,912 | 2.59% |
| United States | 141,337,152 | 4,764,868 | 3.37% |

## 6. Physical Inactivity

Within the report area, 16,020 or 32.2% of adults age 20 and older self-report no leisure time for activity, based on the question: “During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?” This indicator is relevant because current behaviors are determinants of future health, and this indicator may illustrate a cause of significant health issues, such as obesity and poor cardiovascular health.

**Physical Inactivity**
(Centers for Disease Control and Prevention, 2012)

| | Total Population Age 20+ | Population with No Leisure Time Physical Activity | Percentage Population with No Leisure Time Physical Activity |
|---|---|---|---|
| Washington County | 47,257 | 16,020 | 32.2% |
| Ohio | 8,563,244 | 2,254,246 | 25.5% |
| United States | 231,341,061 | 53,415,737 | 22.6% |

## 7. Preventive Health Screenings

This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

**Preventive Health Screenings**

| | Washington County | Ohio | United States |
|---|---|---|---|
| Mammography[1] | 66.0% | 63.0% | 73.0% |
| Pap Test[2] | 79.2% | 78.7% | 78.5% |
| Colonoscopy[3] | 52.8% | 60.0% | 61.3% |
| No HIV Screening[4] | 79.7% | 68.3% | 62.8% |
| Prostate PSA Test[5] | Data unknown | 42.0% | Data unknown |
| Diabetic Monitoring[6] | 83.0% | 63.0% | 73.0% |

## C. Environmental Health

The physical environment directly impacts health and quality of life. Clean air and water, as well as safely prepared food, are essential to public health. Exposure to environmental substances such as lead or hazardous waste increases the risk for preventable disease. Unintentional home, workplace, or recreational injuries affect all age groups and may result in premature disability or mortality.

### 1. Food Insecurity Rate

This indicator reports the estimated percentage of the population that experienced food insecurity at some point during the report year. Food insecurity is the household-level economic and social condition of limited or uncertain access to adequate food, which can be detrimental to physical and mental health, particularly for children.

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1 This indicator reports the percentage of female Medicare enrollees ages 67 to 69 that received mammography screening in Washington County and Ohio in 2013. The number in the United States column reports the percentage of all females within the age range recommended to have the screening in 2013 (University of Wisconsin Population Health Institute, 2014)/(United States Department of Health & Human Services, 2015).

2 This indicator reports the percentage of women age 18 and older who self-report that they have had a Pap test in the past three years (Centers for Disease Control and Prevention, 2006–2012).

3 This indicator reports the percentage of adults 50 and older who self-report that they have had a sigmoidoscopy or colonoscopy (Centers for Disease Control and Prevention, 2006–2012).

4 This indicator reports the percentage of adults age 18–70 who self-report that they have never been screened for HIV (Centers for Disease Control and Prevention, 2011–2012).

5 This indicator reports the prevalence of men age 50 and older who reported having had a Prostate Specific-Antigen (PSA) Test in the past year to test for prostate cancer (Centers for Disease Control and Prevention, 2014).

6 This indicator reports the percentage of diabetic Medicare enrollees ages 65 to 75 that received HbA1c monitoring in 2013. Data for number of at-risk individuals screened for diabetes is unknown (Marietta Memorial Hospital, 2014).

**Food Insecurity Rate**
(Feeding America, 2013)

| | Total Population | Food Insecurity Population, Total | Food Insecurity Rate |
|---|---|---|---|
| Washington County | 61,600 | 9,090 | 14.76% |
| Ohio | 11,570,808 | 1,951,880 | 16.87% |
| United States | 320,750,757 | 48,770,990 | 15.21% |

## 2. Food Access: Fast Food Restaurants

This indicator reports the number of fast food restaurants per 100,000 population. Fast food restaurants are defined as limited-service establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons generally order or select items and pay before eating. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.

**Food Access: Fast Food Restaurants**
(United States Census Bureau)

| | Total Population | Number of Establishments | Establishments, Rate per 100,000 Population |
|---|---|---|---|
| Washington County | 61,778 | 50 | 80.94 |
| Ohio | 11,536,504 | 9,058 | 78.5 |
| United States | 312,732,537 | 227,486 | 72.7 |

## 3. Food Access: Grocery Stores

This indicator reports the number of grocery stores per 100,000 people. Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Included are delicatessen-type establishments. Convenience stores and large general merchandise stores that also retail food, such as supercenters and warehouse club stores, are excluded. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.

**Food Access: Grocery Stores**
(United States Census Bureau)

| | Total Population | Number of Establishments | Establishments, Rate per 100,000 Population |
|---|---|---|---|
| Washington County | 61,778 | 13 | 21.0 |
| Ohio | 11,536,504 | 2,098 | 18.2 |
| United States | 312,732,537 | 66,286 | 21.2 |

### 4. Food Access: Low Food Access

This indicator reports the percentage of the population living in census tracts designated as food deserts. A food desert is defined as a low-income census tract (where a substantial number or share of residents has low access to a supermarket or large grocery store). This indicator is relevant because it highlights populations and geographies facing food insecurity.

**Food Access: Low Food Access**
(United States Department of Agriculture, Economic Research Service, 2010)

| | Total Population | Population with Low Food Access | Percentage Population with Low Food Access |
|---|---|---|---|
| Washington County | 61,778 | 5,759 | 9.32% |
| Ohio | 11,536,504 | 2,880,993 | 24.97% |
| United States | 308,745,538 | 72,905,540 | 23.61% |

## D. Social and Mental Health

This category represents social and mental factors and conditions that directly or indirectly influence overall health status and individual and community quality of life. Mental health conditions and overall psychological well-being and safety may be influenced by substance abuse and violence within the home and within the community.

### 1. Self-Reported Poor or Fair General Health

Within the report area, 18.5% of adults age 18 and older self-report having poor or fair health in response to the question: “Would you say that in general your health is excellent, very good, good, fair, or poor?” This indicator is relevant because it is a measure of general health status.

**Self-Reported Poor or Fair General Health**
(Centers for Disease Control and Prevention, 2006–2012)

| | Total Population Age 18+ | Estimated Population with Poor or Fair Health | Percentage Population with Poor or Fair Health (crude) | Percentage Population with Poor or Fair Health (age-adjusted) |
|---|---|---|---|---|
| Washington County | 48,860 | 9.039 | 18.5% | 16.2% |
| Ohio | 8,781,360 | 1,413,799 | 16.1% | 15.3% |
| United States | 232,556,016 | 37,766,703 | 16.2% | 15.7% |

### 2. Depression: Medicare Beneficiaries

This indicator refers to Medicare fee-for-service beneficiaries who have depression. It is important because depression may lead to physical disorders, disability, and premature mortality.

**Depression Medicare: Beneficiaries**
(Centers for Disease Control and Prevention, 2013)

| | Percentage |
|---|---|
| Washington County | 18.57% |
| Ohio | 18.53% |
| United States | 15.82% |

## 3. Suicide Rate

This indicator refers to the rate of persons committing suicide per 100,000 population. This information is important because factors such as mental illness and other disorders are linked to suicide, and identification of these factors can decrease suicide mortality rates.

**Suicide Rate**

| | Rate per 100,000 | Age-Adjusted Rate |
|---|---|---|
| Washington County (2000 National Health Interview Survey, 2004–2010) | 11.7 | Data unknown |
| Ohio (Centers for Disease Control and Prevention, 2013) | 12.9 | 12.6 |
| United States (2000 National Health Interview Survey, 2004–2010) | 13.4 | 13.0 |

## 4. Mentally Unhealthy Days: Adults

This indicator refers to the average number of reported mentally unhealthy days per month among adults age 18 years and over. Data was collected from respondents who answered the question: “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?” This is important because it is a risk factor for mental illness and other disorders.

**Mentally Unhealthy Days: Adults**
(Centers for Disease Control and Prevention, 2006–2012)

| | Average Number of Mentally Unhealthy Days per Month |
|---|---|
| Washington County | 3.4 |
| Ohio | 3.8 |
| United States | Data unknown |

## E. Maternal and Child Health

One of the most significant areas for monitoring and comparison relates to the health of a vulnerable population: infants and children. This category focuses on birth data and outcomes, as well as mortality data for infants and children. Because maternal care is correlated with birth outcomes, measures of maternal access to, and/or utilization of, care are included. The number of teen mothers delivering babies is a critical indicator of increased risk for both mother and child.

### 1. Babies with Low Birth Weights

This indicator reports the percentage of live births where the infant weighed less than 2,500 grams (approximately 5 pounds, 8 ounces). This data is important because it may represent risks to both the mother's and the infant's current and future health.

**Babies with Low Birth Weights**
(University of Wisconsin Population Health Institute, 2014)

| | Percentage of Low-Birth-Weight Infants |
|---|---|
| Washington County | 8% |
| Ohio | 9% |
| United States | 8% |

### 2. Very Low-Birth-Weight Deliveries

This indicator reports the percentage of live births where the infant weighed less than 1,500 grams (approximately 3 pounds, 4 ounces). This data is important because it may represent risks to both the mother's and the infant's current and future health.

**Very Low-Birth-Weight Deliveries**
(Centers for Disease Control and Prevention, 2006–2012)

| | Percentage of Very Low-Birth-Weight Infants |
|---|---|
| Washington County | 1.5% |
| Ohio | Data unknown |
| United States | 1.4% |

## 3. Neonatal Mortality: Infants under 28 Days of Age

This indicator refers to the number of deaths of infants age 27 days and under. Infants are the most vulnerable group, and their health is often used as an indicator to measure the health and well-being of the mother and the community in which they live in.

**Neonatal Mortality: Infants under 28 Days of Age**
(Centers for Disease Control and Prevention, 2004–2010)

| | Rate of Deaths of Infants under 28 Days of Age |
|---|---|
| Washington County | 5.1% |
| Ohio | Data unknown |
| United States | 4.0% |

## 4. Postneonatal Mortality Rate, Five-Year Moving Averages

This indicator shows the postneonatal mortality rate in deaths per 1,000 live births for infants between 28 and 364 days of age. This data is important because infants are the most vulnerable group, and their health is often used as an indicator to measure the health and well-being of both the mother and the community they live in.

**Postneonatal Mortality Rate, Five-Year Moving Averages**
(Ohio Department of Health, Center for Public Health Statistics and Informatics, 2004–2010)

| | Mortality Rate |
|---|---|
| Washington County | 1.9% |
| Ohio | 2.5% |
| United States | Data unknown |

## 5. Infant Mortality

This indicator reports the mortality rate in deaths per 1,000 live births for infants within the first year of life. Infants under 365 days of age are the most vulnerable group, and their health is often used as an indicator to measure the health and well-being of the entire nation.

**Infant Mortality**
(Ohio Department of Health, 2010–2014)

| | Infant Mortality Rate |
|---|---|
| Washington County | 3.6% |
| Ohio | 7.5% |
| United States | 6.0% |

## 6. Mothers Who Received Early Prenatal Care

This indicator reports the number of births to females receiving adequate prenatal care beginning in the first trimester of their pregnancy. Prenatal visits to healthcare providers for examinations are important in order to ensure the health of the fetus and mother.

**Mothers Who Received Early Prenatal Care**
(Centers for Disease Control and Prevention, 2006–2012)

| | Percentage Receiving Prenatal Care |
|---|---|
| Washington County | 85.4% |
| Ohio | 86.7% |
| United States | 70.5% |

## 7. Teen Births

This indicator reports the rate of total births to women age 15 to 19 per 1,000 female population age 15 to 19. This indicator is relevant because in many cases, teen parents have unique social, economic, and health support services. Additionally, high rates of teen pregnancy may indicate the prevalence of unsafe sex practices.

**Teen Births**
(Centers for Disease Control and Prevention, 2006–2012)

| | Female Population Age 15–19 | Births to Mothers Age 15–19 | Teen Birth Rate per 1,000 Population |
|---|---|---|---|
| Washington County | 2,004 | 68 | 33.8 |
| Ohio | 402,707 | 14,497 | 36.0 |
| United States | 10,736,677 | 392,962 | 36.6 |

# F. Death, Illness, and Injury

Health status in a community is measured in terms of mortality (rates of death within a population) and morbidity (rates of the incidence and prevalence of disease). Mortality may be represented by crude rates or age-adjusted (AA) rates, by degree of premature death (years of potential life lost [YPLL]), and by cause (disease–cancer and non-cancer or injury–intentional/–unintentional). Morbidity may be represented by age-adjusted (AA) incidence of cancer and chronic disease.

## 1. Mortality: Premature Death

This indicator reports years of potential life lost (YPLL) before age 75 per 100,000 population for all causes of death, age-adjusted to the 2000 standard. YPLL measures premature death and is calculated by subtracting the age of death from the 75-year benchmark. This indicator is relevant because a measure of premature death can provide a unique and comprehensive look at overall health status.

**Mortality: Premature Death**
(University of Wisconsin Population Health Institute, 2014)

| | Total Population, 2008–2010 Average | Total Premature Deaths, 2008–2010 Average | Total Years of Potential Life Lost, 2008–2010 Average | Years of Potential Life Lost, Rate per 100,000 Population |
|---|---|---|---|---|
| Washington County | 61,755 | 286 | 4,778 | 7,736 |
| Ohio | 11,544,951 | 46,123 | 863,271 | 7477 |
| United States | 311,616,188 | 1,074,667 | 21,327,690 | 6,851 |

## 2. Mortality: Unintentional Injury

This indicator reports the rate of death due to unintentional injury (accident) per 100,000 population. Figures are reported as crude rates and age-adjusted to year 2000 standard. Rates are re-summarized for report areas from county-level data where data is available. This indicator is relevant because accidents are a leading cause of death in the United States. The Healthy People 2020 target is for this rate to drop to below 36 age-adjusted deaths per 100,000 nationally.

**Mortality: Unintentional Injury**
(Centers for Disease Control and Prevention, 2009–2013)

| | Total Population | Average Annual Deaths, 2007–2011 | Crude Death Rate per 100,000 Population | Age-Adjusted Death Rate per 100,000 Population |
|---|---|---|---|---|
| Washington County | 61,657 | 30 | 48.66 | 42.4 |
| Ohio | 11,545,077 | 5,066 | 43.88 | 41.7 |
| United States | 311,430,373 | 124,733 | 40.05 | 38.6 |

### 3. Mortality: Motor Vehicle Accident

This indicator reports the rate of death due to motor vehicle crashes per 100,000 population, which include collisions with another motor vehicle, a non-motorist, a fixed object, or a non-fixed object, as well as an overturn and any other non-collision. This indicator is relevant because motor vehicle crash deaths are preventable, and they are a cause of premature death.

**Mortality: Motor Vehicle Accident**
(Centers for Disease Control and Prevention, 2009–2013)

| | Total Population | Average Annual Deaths, 2007–2011 | Crude Death Rate per 100,000 Population | Age-Adjusted Death Rate per 100,000 Population |
|---|---|---|---|---|
| Washington County | 61,657 | 6 | 10.1 | 9.4 |
| Ohio | 11,545,077 | 1,111 | 9.6 | 9.4 |
| United States | 311,430,373 | 34,139 | 11.0 | 10.8 |

## G. Chronic Disease

### 1. Heart Disease Incidence

Of adults age 18 and older, 2,930 or 6.6% have been told by a doctor that they have coronary heart disease or angina. This indicator is relevant because coronary heart disease is a leading cause of death in the United States and is also related to high blood pressure, high cholesterol, and heart attacks.

**Heart Disease Incidence**
(Centers for Disease Control and Prevention, 2011–2012)

| | Population 18+ | Total Adults with Heart Disease | Percentage Adults with Heart Disease |
|---|---|---|---|
| Washington County | 44,351 | 2,930 | 6.6% |
| Ohio | 8,694,297 | 447,154 | 5.1% |
| United States | 236,406,904 | 10,407,185 | 4.4% |

## 2. Mortality: Heart Disease

Within the report area, the rate of death due to coronary heart disease per 100,000 population is 176.5. Figures are reported as crude rates and age-adjusted to year 2000 standard. Rates are re-summarized for report areas from county level data where data is available. This indicator is relevant because heart disease is a leading cause of death in the United States.

**Mortality: Heart Disease**
(Centers for Disease Control and Prevention, 2009–2013)

| | Total Population | Average Annual Deaths, 2007–2011 | Crude Death Rate per 100,000 Population | Age-Adjusted Death Rate per 100,000 Population |
|---|---|---|---|---|
| Washington County | 61,657 | 149 | 241.98 | 176.5 |
| Ohio | 11,545,077 | 26,244 | 227.32 | 189.6 |
| United States | 311,430,373 | 600,899 | 192.95 | 175.0 |

## 3. Diabetes Incidence

This indicator reports the percentage of adults age 20 and older who have been told by a doctor that they have diabetes. This indicator is relevant because diabetes is a prevalent problem in the United States; it may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

**Diabetes Incidence**
(Centers for Disease Control and Prevention, 2012)

| | Total Population Age 20+ | Population with Diagnosed Diabetes | Population with Diagnosed Diabetes (crude rate) | Population with Diagnosed Diabetes (age-adjusted rate) |
|---|---|---|---|---|
| Washington County | 47,320 | 6,057 | 12.80 | 10.70% |
| Ohio | 8,569,053 | 970,840 | 11.33 | 10.14% |
| United States | 234,058,710 | 23,059,940 | 9.85 | 9.11% |

## 4. High Blood Pressure

Of adults age 18 and older, 14,169 or 29% have been told by a doctor that they have high blood pressure or hypertension. This indicator is important because high blood pressure is a risk factor for developing more serious health conditions.

**High Blood Pressure**
(Centers for Disease Control and Prevention, 2006–2012)

| | Total Population Age 18+ | Total Adults with High Blood Pressure | Percentage Adults with High Blood Pressure |
|---|---|---|---|
| Washington County | 48,860 | 14,169 | 29.0% |
| Ohio | 8,781,360 | 2,529,032 | 28.8% |
| United States | 232.556,016 | 65,476,522 | 28.2% |

## 5. Mortality: Lung Disease

This indicator reports the rate of death due to chronic lower respiratory disease per 100,000 population. Figures are reported as crude rates and age-adjusted to year 2000 standard. Rates are re-summarized for report areas from county level data, only where data is available. This indicator is relevant because lung disease is a leading cause of death in the United States.

**Mortality: Lung Disease**
(Centers for Disease Control and Prevention, 2009–2013)

| | Total Population | Average Annual Deaths, 2007–2011 | Crude Death Rate per 100,000 Population | Age-Adjusted Death Rate per 100,000 Population |
|---|---|---|---|---|
| Washington County | 61,657 | 48 | 77.20 | 55.4 |
| Ohio | 11,545,077 | 6,886 | 59.65 | 50.7 |
| United States | 311,430,373 | 142,214 | 45.66 | 42.2 |

### 6. Mortality: Stroke

Within the report area, there are an estimated 43.4 deaths due to cerebrovascular disease (stroke) per 100,000 population. This is greater than the Healthy People 2020 target of less than or equal to 33.8. Figures are reported as crude rates and age-adjusted to year 2000 standard. Rates are re-summarized for report areas from county level data where data is available. This indicator is relevant because stroke is a leading cause of death in the United States. The Healthy People 2020 target is for this rate to drop to below 33.8 age-adjusted deaths per 100,000 nationally.

**Mortality: Stroke**
(Centers for Disease Control and Prevention, 2009–2013)

| | Total Population | Average Annual Deaths, 2007–2011 | Crude Death Rate per 100,000 Population | Age-Adjusted Death Rate per 100,000 Population |
|---|---|---|---|---|
| Washington County | 61,657 | 37 | 60.7 | 43.4 |
| Ohio | 11,545,077 | 5,700 | 49.4 | 41.4 |
| United States | 311,430,373 | 128,955 | 41.4 | 37.9 |

## H. Cancers

### 1. All Cancers

This indicator examines the number of new invasive cancer cases and the age-adjusted incidence rates (per 100,000 population), along with the number of total cancer deaths and the age-adjusted mortality rates. This indicator is relevant because cancer is a leading cause of death, and it is important to identify cancers separately to better target interventions.

**All Cancers**
(Ohio Department of Health, 2016)

| | Number of New Invasive Cases | Incidence Rate per 100,000 | Number of Cancer Deaths | Mortality Rate per 100,000 |
|---|---|---|---|---|
| Washington County | 410 | 474.4 | 169 | 188.0 |
| Ohio | 62,802 | 452.4 | 24,906 | 176.8 |

## 2. Breast Cancer

This indicator examines the number of new breast cancer cases and the age-adjusted incidence rates (per 100,000 population), along with the number of total breast cancer deaths and the age-adjusted mortality rates. This indicator is important because breast cancer is a leading cause of death in women and the most commonly diagnosed cancer among women. It is important to identify cancer early in order to better target interventions and prevent disease progression.

**Breast Cancer**
(Ohio Department of Health, 2016)

| | Number of New Invasive Cases | Incidence Rate per 100,000 | Number of Cancer Deaths | Mortality Rate per 100,000 |
|---|---|---|---|---|
| Washington County | 56 | 131.9 | 12 | 23.5 |
| Ohio | 9,166 | 125.8 | 1,775 | 22.7 |

## 3. Lung and Bronchus Cancer

This indicator examines the number of new lung and bronchus cancer cases and the age-adjusted incidence rates (per 100,000 population), along with the number of total lung and bronchus cancer deaths and the age-adjusted mortality rates. This indicator is important because lung cancer is a leading cause of death, and it is important to identify cancer early in order to better target interventions and prevent disease progression.

**Lung and Bronchus Cancer**
(Ohio Department of Health, 2016)

| | Number of New Invasive Cases | Incidence Rate per 100,000 | Number of Cancer Deaths | Mortality Rate per 100,000 |
|---|---|---|---|---|
| Washington County | 84 | 93.4 | 52 | 56.2 |
| Ohio | 9,529 | 67.4 | 7,236 | 51.2 |

## 4. Colon and Rectum Cancer

This indicator examines the number of new colon and rectum cancer cases and the age-adjusted incidence rates (per 100,000 population), along with the number of total colon and rectum cancer deaths and the age-adjusted mortality rates. This indicator is important because colon cancer is a leading cause of death, and it is important to identify cancer early in order to better target interventions and prevent disease progression.

**Colon and Rectum Cancer**
(Ohio Department of Health, 2016)

| | Number of New Invasive Cases | Incidence Rate per 100,000 | Number of Cancer Deaths | Mortality Rate per 100,000 |
|---|---|---|---|---|
| Washington County | 37 | 43.5 | 12 | 14.8 |
| Ohio | 5,652 | 40.6 | 2,251 | 16.0 |

## 5. Prostate Cancer

This indicator examines the number of new prostate cancer cases and the age-adjusted incidence rates (per 100,000 population), along with the number of total prostate cancer deaths and the age-adjusted mortality rates. This indicator is important because prostate cancer is a leading cause of death, and it is important to identify cancer early in order to better target interventions and prevent disease progression.

**Prostate Cancer**
(Ohio Department of Health, 2016)

| | Number of New Invasive Cases | Incidence Rate per 100,000 | Number of Cancer Deaths | Mortality Rate per 100,000 |
|---|---|---|---|---|
| Washington County | 32 | 75.5 | 5 | 14.7 |
| Ohio | 6,931 | 101.7 | 1,043 | 18.5 |

## I. Communicable Disease

Measures within this category include diseases that are usually transmitted through person-to-person contact or shared use of contaminated instruments/materials. Many of these diseases can be prevented through a high level of vaccine coverage of vulnerable populations or through the use of protective measures, such as condoms for the prevention of sexually transmitted diseases.

## 1. Flu Vaccinations for Adults Age 65+

This indicator examines the number of adults age 65 and over who report having a pneumococcal vaccine.

**Flu Vaccinations for Adults 65+**
(Centers for Disease Control and Prevention, 2006–2012)

| | Percentage Receiving Flu Vaccination |
|---|---|
| Washington County | 65.8% |
| Ohio | 66.6% |

## 2. Chlamydia Incidence

This indicator examines the incidence rate of chlamydia cases per 100,000 population. This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

**Chlamydia Incidence**
(U.S. Department of Health & Human Services, 2014)

| | Total Population | Total Chlamydia Infections | Chlamydia Infection Rate per 100,000 Population |
|---|---|---|---|
| Washington County | 61,310 | 125 | 203.88 |
| Ohio | 11,573,058 | 54,858 | 474.10 |
| United States | 316,128,839 | 1,441,789 | 456.08 |

## 3. Gonorrhea Incidence

This indicator reports the incidence rate of gonorrhea cases per 100,000 population. This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

**Gonorrhea Incidence**
(U.S. Department of Health & Human Services, 2014)

| | Total Population | Total Gonorrhea Infections | Gonorrhea Infection Rate per 100,000 Population |
|---|---|---|---|
| Washington County | 61,310 | 15 | 24.47 |
| Ohio | 11,573,058 | 16,237 | 140.30 |
| United States | 316,128,839 | 350,062 | 110.73 |

## 4. Syphilis Incidence

This indicator reports the incidence rate of syphilis cases per 100,000 population. This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

**Syphilis Incidence**
(Ohio Department of Health, 2014)

| | Syphilis Infection Rate |
|---|---|
| Washington County | 3.3% |
| Ohio | 10.5% |

## 5. Tuberculosis Incidence

This indicator reports the incidence rate of tuberculosis cases per 100,000 population. This indicator is relevant because tuberculosis is communicable and difficult to treat and can be fatal to those infected.

**Tuberculosis Incidence**
(Ohio Department of Public Health, 2010–2014)

| | Tuberculosis Infection Rate |
|---|---|
| Washington County | 0.6% |
| Ohio | 1.4% |
| United States | 1.0% |

## 6. HIV/AIDS Prevalence

This indicator reports prevalence rate of HIV/AIDS per 100,000 population of adolescents and adults age 13 and older. This indicator is relevant because HIV/AIDS is a life-threatening communicable disease that disproportionately affects minority populations and may also indicate the prevalence of unsafe sex practices.

**HIV/AIDS Prevalence**
(U.S. Department of Health & Human Services, 2013)

| | Population Age 13+ | Population with HIV/AIDS | Population with HIV/AIDS, Rate per 100,000 Population |
|---|---|---|---|
| Washington County | 52,756 | 38 | 72.03 |
| Ohio | 9,694,894 | 19,441 | 200.53 |
| United States | 263,765,822 | 931,526 | 353.16 |

## J. Sentinel Events

Sentinel events are those cases of unnecessary disease, disability, or untimely death that could be avoided if appropriate and timely medical care or preventive services were provided. These include vaccine-preventable illness, late-stage cancer diagnosis, and unexpected syndromes or infections. Sentinel events may alert the community to health system problems such as inadequate vaccine coverage, lack of primary care and/or screening, a bioterrorist event, or the introduction of globally transmitted infections.

### 1. Measles Incidence

This indicator reports the incidence of measles infections per 100,000 population. Measles is a viral respiratory disease that is highly contagious, and it can be fatal when contracted by children. In Washington County, there were no cases of measles in 2012 (Ohio Department of Health, Bureau of Infectious Diseases, 2012).

### 2. Mumps Incidence

This indicator reports the incidence of mumps infections per 100,000 population. Mumps is a viral disease that is highly contagious. In Washington County, there were no cases of measles in 2012 (Ohio Department of Health, Bureau of Infectious Diseases, 2012).

# IV. Health Resource Availability

# IV. Health Resource Availability

The availability of healthcare and health resources represents factors associated with health system capacity, which may include both the number of licensed and credentialed health personnel and the physical capacity of health facilities. In addition, the category of health resources includes measures of access, utilization, cost and quality of healthcare, and prevention services. Service delivery patterns and roles of public and private sectors as payors and/or providers may also be relevant.

## A. Access to Primary Care

This indicator reports the number of licensed primary care physicians per 100,000 people, and it is relevant because a shortage of health professionals contributes to access and health status issues. Doctors classified as "primary care physicians" by the American Medical Association include general family medicine MDs and DOs, general practice MDs and DOs, general internal medicine MDs, and general pediatric MDs. Physicians age 75 and over and physicians practicing subspecialties within the listed specialties are excluded.

**Primary Healthcare Provider Distribution**

| | Washington County | | Ohio | | United States | |
|---|---|---|---|---|---|---|
| | Number of Providers | Providers per 100,000 | Number of Providers | Providers per 100,000 | Number of Providers | Providers per 100,000 |
| Primary Care Physicians (U.S. Department of Health & Human Services, Health Resources and Services Administration, 2012) | 46 | 74.8 | 8,642 | 74.9 | 233,862 | 74.5 |
| Dentists (U.S. Department of Health & Human Services, Health Resources and Services Administration, 2013) | 25 | 40.8 | 6,626 | 57.3 | 199,743 | 63.2 |
| Mental Health Providers (University of Wisconsin Population Health Institute, 2014) | 28 | 44.3 | 11,185 | 94.4 | 426,991 | 134.1 |

## B. Percentage of Adults without a Regular Primary Care Physician

This indicator reports the percentage of adults age 18 and older who self-report that they do not have at least one person who they think of as their personal physician or healthcare provider. This indicator is relevant because access to regular primary care is important to preventing major health issues and emergency department visits.

**Percentage of Adults without a Regular Primary Care Physician**
(Centers for Disease Control and Prevention, 2011–2012)

| | Survey Population Adults Age 18+ | Total Adults without Any Regular Physician | Percentage of Adults without Any Regular Physician |
|---|---|---|---|
| Washington County | 44,271 | 5,544 | 12.52% |
| Ohio | 8,711,922 | 1,624,401 | 18.65% |
| United States | 236,884,668 | 52,290,932 | 22.07% |

## C. Providers within MHS

Although the ratio of providers to population may show a significant supply in Washington County, there may still be a need to recruit additional providers due to physician age, appointment age, and practice payor restrictions.

A provider needs assessment completed in 2016 suggested physician deficits in the following specialties: family medicine, internal medicine, pediatrics, dermatology, gastroenterology, hematology/oncology, infectious disease, nephrology, neurology, obstetrics/gynecology, psychiatry, rheumatology, orthopedic surgery, otolaryngology, and plastic surgery.

A significant number of the physicians on the MHS medical staff are at or above the age of 55. Those providers compose 39.9 full-time equivalents of physician coverage in Washington County.

## D. Population Receiving Medicaid

This indicator reports the percentage of the population with insurance enrolled in Medicaid (or other means-tested public health insurance). This indicator is relevant because it assesses vulnerable populations that are more likely to have multiple health access, health status, and social support needs; when it is combined with poverty data, this measure can be used by providers to identify gaps in eligibility and enrollment.

**Population Receiving Medicaid**
(United States Census Bureau, 2015)

| | Total Population (for whom insurance status is determined) | Population with Any Health Insurance | Population Receiving Medicaid | Percentage of Insured Population Receiving Medicaid |
|---|---|---|---|---|
| Washington County | 60,759 | 54,207 | 11,609 | 21.42% |
| Ohio | 11,386,433 | 10,149,161 | 1,965,699 | 19.37% |
| United States | 309,082,272 | 265,204,128 | 55,035,660 | 20.75% |

## E. Dental Care Utilization

This indicator reports the percentage of adults age 18 and older who self-report that they have not visited a dentist, dental hygienist, or dental clinic within the past year. This indicator is relevant because engaging in preventive behaviors decreases the likelihood of developing future health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services. This source also reported that nearly 30% of adults in Washington County reported poor dental health, defined by having six or more of their permanent teeth removed due to tooth decay, gum disease, or infection, compared to 18.7% of Ohio adults reporting poor dental health.

**Dental Care Utilization**
(Centers for Disease Control and Prevention, 2006–2010)

| | Total Population (Age 18+) | Total Adults without Recent Dental Exam | Percentage of Adults with No Dental Exam |
|---|---|---|---|
| Washington County | 48,777 | 20,104 | 41.2% |
| Ohio | 8,781,360 | 2,426,123 | 27.6% |
| United States | 235,375,690 | 70,965,788 | 30.2% |

## F. Preventable Hospital Events

This indicator reports the discharge rate (per 1,000 Medicare enrollees) for conditions that are ambulatory care sensitive (ACS). ACS conditions include pneumonia, dehydration, asthma, diabetes, and other conditions that could have been prevented if adequate primary care resources were available and accessed by those patients. This indicator is relevant because analysis of ACS discharges allows for demonstrating a possible “return on investment” from interventions that reduce admissions (for example, for uninsured or Medicaid patients) through better access to primary care resources.

**Preventable Hospital Events**
(Dartmouth College Institute for Health Policy & Clinical Practice, 2012)

| | Total Medicare Part A Enrollees | ACS Condition Hospital Discharges | ACS Condition Discharge Rate |
|---|---|---|---|
| Washington County | 8,389 | 738 | 88.0 |
| Ohio | 987,597 | 70,817 | 71.7 |
| United States | 58,209,898 | 3,448,111 | 59.2 |

# V. Community Health Stakeholder Input

# V. Community Health Stakeholder Input

The Washington County Health Department conducted a comprehensive Community Health Assessment that was published in February 2017. That assessment utilized two separate and distinct methods to gather community health stakeholder input. Key informant interviews were conducted at two WashCo Wellness Partners meetings, and a survey was completed by community residents.

The two WashCo Wellness Partners meetings were held on May 24 and June 2, 2016, at the Washington County Emergency Operations Center. These were two identical meetings, one conducted in the morning and one in the evening to allow for greater attendance by community partners. Two public health accreditation technicians from the Washington County Health Department facilitated the meetings.

The second outreach activity took place at the Washington County Fair, which was held in Marietta, Ohio, from September 2 through 6, 2016. Public health officials from the Washington County Health Department engaged fair attendees with the paper survey at an appointed booth, resulting in 89 completed surveys. Surveys were collected on September 3 from 9 a.m. to 6 p.m., September 4 from 11 a.m. to 5 p.m., and September 5 from 10 a.m. to 5 p.m.

Additionally, this survey was advertised on the Washington County website, the Washington County Health Department's Facebook page, and the WashCo Wellness Partners' Facebook page, and it was sent to all Washington County employees. The survey closed on September 7, and its total accumulation (both paper and online) was 244.

## A. Key Informant Interview Results (Washington County Health Department, February 2017)

*NOTE:* Asterisks (*) indicate an item was mentioned more than once.

### 1. What makes you proud of Washington County?

» Recreational trails; outdoor opportunities.***
» The Ohio and Muskingum Rivers.**
» Historical significance.**
» Robust health system.*
» The close family culture to help those in need.*
» Geographically beautiful landscape and environment.*
» Downtown Marietta.*
» Higher education institutions (Marietta College and WSCC).*
» Neighbors helping neighbors.*
» Great, caring, friendly people live here.

- Natural resources.
- Community events.
- Farmers markets.
- Community pride.
- Small community; hometown feel.
- Many agencies working together; partnerships.
- Volunteers are committed and able.
- Lots of talent here.
- Healthiest county in Appalachian Ohio.
- How we rally around a cause (e.g., fund-raisers).
- People, organizations, and partners effectively communicating to prepare, respond, and recover any affected population.
- There are a lot of small groups (pockets) of people doing really great work in our communities. For the most part, our nonprofit community agencies collaborate well to serve the residents of Washington County.

## 2. What is not going so well in Washington County?

- Obesity.*
- Childhood obesity.*
- Drug use; child opiate addiction; lack of substance abuse care and addiction recovery services.*
- Smoking, obesity, and physical inactivity are three of our weakest health behaviors.*
- City government doesn't address critical needs of the community because of self-interest and staying in office; too much political maneuvering.*
- Economy/loss of higher-paying jobs.*
- General public not being proactive in wanting to be healthy; reluctance to take unpopular steps that would improve health.*
- Services for the aging populations; awareness for aging issues.
- Mental health services.
- Access to healthcare.
- Affordable housing.
- Aging infrastructure: roads (specifically township roads); water/sewer.
- Air and water quality causing illness and cancers.
- Ability to think outside the box and be proactive.
- Behavioral health.
- School systems.
- Lack of parks and activities for youth.
- Exporting smart kids for better jobs.

- Friction between county and city.
- Coordination between medical services, social services, and community organizations.
- Getting people to share their needs; pride gets in the way.
- Dialysis transportation.
- Help for those just above the poverty threshold.
- Volunteerism numbers seem to be down overall.
- Lack of economic development.
- Fiber broadband-connectivity.
- Lack of cultural diversity.
- Health and wellness changes at the hospital.
- Fee-for-service medical care does not incentivize improved health outcomes.
- Many of our educated and talented youth are leaving for professional work elsewhere.
- Number of residents with inadequate food sources as evidenced by the large numbers of people relying on food banks regularly.

## 3. What are some specific examples of people or groups working together to improve the health and quality of life in your county and region?

- Community Health Council.*
- Washington County Health Department working with community, children, schools, and gardening for a goal of a healthier community; healthy community grants; bikes for work sites.*
- Marietta Trail System and River Trail.*
- Memorial Health System; Strecker Cancer Center partnered with the American Cancer Society.
- Washington County incentives for better health by reducing insurance costs for those participating in wellness activities.
- Devola Multi-Use Trail to link walking trails to extend safe places to walk/bike.
- Kroger Wetlands volunteers work to maintain trails and green space in city.
- Groups/organizations promoting wellness.
- Health screening events for county residents.
- YMCA.
- Safe Kids Coalition.
- Family and Children First Council.
- Help Me Grow.
- United Way.
- Local Emergency Planning Commission.
- WashCo Wellness Partners.

- Marietta Health Department.
- Water First For Thirst campaign.
- Homeless Initiative.
- Wellness coalitions.
- Farmers markets and master gardeners; community gardens.
- Dissemination of evidence-based education.
- Referrals to scheduled evidence-based workshops.
- Better communication between partners/agencies.
- Widespread adoption of the Incident Command System.
- Many youth services organizations.
- Concerned citizens groups.
- O'Neill Senior Center (meeting needs of elderly).
- Retired and Senior Volunteer Program (RSVP).
- Food pantries; free meals at churches.
- Local city and county police departments.
- Geocaching.
- Frontier Hiking Club.
- Marietta Adventure Company rentals.
- Walk with a Doc.
- SNAP-Ed; Cooking Matters; Diabetes Prevention Program; Live Healthy Kids.
- Work@Health Coalition; Creating Healthy Communities Coalition; Lifestyle Change Network.
- Shale Crescent USA jobs.

## 4. What do you believe is keeping Washington County from doing what needs to be done to improve health and quality of life?

- Funds; financial restrictions.*
- Most people are resistant to change and want to do things the way they have always been done.*
- Culture shift as it relates to population health.
- City government doesn't address critical needs of the community because of self-interest and staying in office.
- Inadequate mental health resources.
- Drug abuse.
- Homelessness.
- People are blind to what doesn't directly touch their lives.
- Culture.

- Lack of education/understanding.
- Presence of factories in area.
- Stagnation; people stuck in their ways; not wanting to think outside the box.
- Territorial.
- Lack of interest and empathy.
- Inadequate connection between healthcare and community resources.
- Fractured public health (three local health departments).
- Large expected increase in senior population.
- Economy.
- Willingness to volunteer.
- Educating our community—call to action.
- Fear of change.
- There is a lack of value in health prevention and wellness and a lack of focus on helping children develop healthy habits.
- Physicians do not promote disease prevention and wellness.
- Healthcare providers are too liberal when writing narcotic prescriptions.
- Momentum; incentive; access for all; information where people need it; feet on the street.

## 5. What actions, policy, or funding priorities would you support to build a healthier community?

- Community-wide effective health planning.*
- Retention of clinicians and services needed from medical community.
- Mental health levy.
- Drug treatment facility; drug abuse education at junior and high school levels.
- Homeless assistance.
- More affordable housing.
- Activities for families (be active and healthy); free exercise classes (especially for children).
- Mental health and substance abuse programs and recovery services.
- Building of more fitness areas, bike trails, etc.
- Commissioners and city officials offering more funding.
- Federal and state agencies offering more grants.
- Parks.
- Schools.
- Local health department consolidation.
- Economic development.
- State tobacco tax significant increase.

- Adopt a county-wide “No Tobacco Till 21” policy.
- Funding to supply smoking cessation classes.
- Increased funding in alternative modes of transportation.
- Eliminate foods with zero nutrition from SNAP.
- Development of a network of evidence-based program providers with annual calendar of events for referrals by community, with incentives for participation by county residents.
- Increased funding.
- Preparing projects that could be ready to submit when funding presents.
- Greater coordination among current providers; more networking.
- Any action or policy that promotes volunteerism and grant funding for communities’ prepared-ness and wellness.
- Take emphasis off of seeking funds and more emphasis on understanding our needs.
- Creating Healthy Communities and Communities Preventing Chronic Disease grants; wellness grants.
- Policy and environmental changes at work sites, parks and rec, environmental policies.
- Expand Live Healthy Kids to all Washington County elementary schools.
- County/municipal planners design active living/commuting communities.
- We all need to adopt a “health in all policies” approach.
- Work@Health.

## 6. What is the most important thing that Washington County can do to improve the health and quality of life of its residents?

- Educate community about health and the value of being healthy.***
- Change the culture; make the healthy choice the easy choice.
- Coordination of existing community resources.
- Access to mental healthcare.
- Substance abuse programs.
- Implement more healthy lifestyle programs into our schools.
- Gardening; growing our own healthy foods.
- The companies, hospital groups, and agencies that have more money come together to improve healthcare access and wellness centers and strive for a healthy community.
- Become proactive.
- Take a holistic approach.
- Address prevention and mental health issues at an early age.
- We need to get our schools in better shape; this will deter new families to the area and healthy families from staying in the area. We need to start with our kids!
- Reduce tobacco use.

- Improve economy.
- Increased code enforcement effort to prevent identifiable disasters from occurring.
- Work together, make all resources known.
- Involve all our schools' and businesses' health—both mental and physical.
- Have an open mind for change to help create a healthier community
- All stakeholders need to focus on making the healthy choice the easy choice via policy, system, and environmental changes in all of our communities. We all need to adopt a "health in all policies" approach.

## B. Key Informant Interview Participants

**American Red Cross**
Chris Marrero

**Behavioral Health Board–The Right Path**
Cathy Harper

**Buckeye Hills–Area Agency on Aging**
Mindy Cayton

**City of Marietta**
Cathy Harper

**Family and Children First**
Cindy Davis

**Marietta City Health Department**
Vickie Kelly
Kelly Miller
Jonni Tucker

**Marietta College (Physician Assistant Program)**
Miranda Collins

**Marietta Convention and Visitors Bureau**
Jeri Knowlto

**Memorial Health System**
Shawn Bail

**O'Neill Center**
Connie Huntsman

**Proactive Health Solutions**
Darren Swartz

**Retired and Senior Volunteer Program (RSVP)**
Lisa Valentine

**Washington County Health Department**
Jody Alden
Jayne Call
Angela Lowry
Court Witschey
Richard Wittberg

**Washington State Community College**
Heather Kincaid

**YMCA**
Suzy Zumwalde

## C. Perceptions of Health Survey Results (Washington County Health Department, February 2017)

### 1. Where do you get information about health services, social services, and community resources in Washington County? (Choose all that apply.)

Participants were asked to select all the sources through which they are informed about community services and health information relevant to improving health. The major sources of this information, as indicated by survey data, are family/friends, doctor/healthcare provider, Internet search, newspaper/magazine, television, and social media, respectively. The least utilized sources are the United Way's 2-1-1, "I don't know where to get information," private agencies, food pantry, and mental health/behavioral health providers.

**Sources for Health Information in Washington County**

| Answer Choices | Number of Respondents | Percentage |
|---|---|---|
| Family/friends | 125 | 52% |
| Doctor/healthcare provider | 122 | 51% |
| Internet search | 112 | 46% |
| Newspaper/magazine | 87 | 36% |
| Television | 85 | 35% |
| Facebook/Twitter/other social media | 66 | 27% |
| Hospital | 55 | 23% |
| Health department | 54 | 22% |
| Radio | 41 | 17% |
| Work site | 39 | 16% |
| Senior centers | 34 | 14% |
| Job and family services | 31 | 13% |
| Service agency (e.g., WIC, Help Me Grow, OSU Extension) | 28 | 12% |
| Schools | 25 | 10% |
| Places of worship | 20 | 8% |
| Library | 17 | 7% |
| Mental health/behavioral health providers | 17 | 7% |
| Food pantry | 12 | 5% |
| Private agencies | 11 | 5% |
| I don't know where to get information | 8 | 3% |
| 2-1-1 | 4 | 2% |
| | **N=241** | |

*NOTE:* The table above shows the percentage of respondents who selected each answer option. Percentages total more than 100%, as respondents were asked to select multiple areas.

## 2. Which of the following do you think ***prevents*** you and/or other people from accessing health services, social services, and other resources in Washington County? (Choose all that apply.)

Participants were asked to select any and all variables they felt prevented themselves and/or others from accessing health services and resources in Washington County. Survey respondents indicated the top five preventive factors were cost, insurance coverage (inadequate or lack of), knowledge or information about services/resources (inadequate or lack of), availability, and uncomfortable asking for help, respectively. The five options voted least likely to prevent residents from accessing health services were provider shortage, substance abuse, housing (inadequate or lack of residential

address), “I don’t think anything prevents people in Washington County from accessing services,” and “Don’t know.”

**Factors Preventing Health Service Access**

| Answer Choices | Number of Respondents | Percentage |
|---|---|---|
| Cost | 147 | 62% |
| Insurance coverage (inadequate or lack of) | 116 | 49% |
| Knowledge or information about services/resources (inadequate or lack of) | 85 | 36% |
| Availability | 75 | 32% |
| Uncomfortable asking for help | 67 | 28% |
| Unable to meet eligibility requirements for services or benefits | 65 | 27% |
| Only want help when sick/in emergency | 63 | 26% |
| Personal choice | 49 | 21% |
| Personal conflict (schedule, respite, legal, spouse, etc.) | 43 | 18% |
| Transportation | 43 | 18% |
| Wait time (lack of timely access when needed) | 42 | 18% |
| Provider shortage | 29 | 12% |
| Substance abuse | 22 | 9% |
| Housing (inadequate or lack of residential address) | 14 | 6% |
| I don’t think anything prevents people in Washington County from accessing services | 11 | 5% |
| Don’t know | 8 | 3% |
| | **N=238** | |

*NOTE:* The table above shows the percentage of respondents who selected each answer option. Percentages total more than 100%, as respondents were asked to select multiple answers.

## 3. Please rate each of the following aspects of Washington County.

Participants were asked to rate each listed health factor in Washington County as follows: Strong, Adequate, or Needs Improvement. The five weakest factors were substance abuse treatment, substance abuse prevention, the economy, sexual health and education, and mental health treatment, demonstrating a significant lack of services for these areas of community health. The five strongest factors were as follows: religious/spiritual values, residents (friendly, supportive, etc.), good place to raise children, good place to retire, and food availability. Followed closely behind these five was “family life,” adding to the trend of family values.

## Washington County Health Factors

| Health Factor | Strong | Adequate | Needs Improvement | Total |
|---|---|---|---|---|
| Substance abuse treatment | 2 | 32 | 163 | 197 |
| Substance abuse prevention | 4 | 44 | 148 | 196 |
| Economy | 4 | 55 | 157 | 216 |
| Sexual health and education | 6 | 93 | 73 | 172 |
| Mental health treatment | 6 | 50 | 132 | 188 |
| Job opportunities | 7 | 50 | 165 | 222 |
| Suicide prevention | 9 | 52 | 122 | 183 |
| Environmental factors (clean and safe air, water, etc.) | 9 | 78 | 140 | 227 |
| Social services | 9 | 122 | 66 | 197 |
| Caregiver support | 10 | 79 | 105 | 194 |
| Transportation services | 11 | 94 | 108 | 213 |
| Housing options | 12 | 93 | 107 | 212 |
| Healthy behaviors and lifestyles | 12 | 97 | 112 | 221 |
| Adult health (e.g., rates of disease among adults) | 13 | 85 | 107 | 205 |
| Women's health | 14 | 120 | 58 | 192 |
| Health insurance options | 14 | 85 | 107 | 206 |
| Infant/child health | 17 | 112 | 47 | 176 |
| Early childhood care | 17 | 91 | 77 | 185 |
| Education and schools (kindergarten through twelfth grade) | 21 | 91 | 105 | 217 |
| Arts and cultural opportunities | 23 | 98 | 91 | 212 |
| Healthcare quality | 24 | 108 | 88 | 220 |
| Social opportunities/interactions | 24 | 136 | 60 | 220 |
| Healthcare access | 27 | 126 | 67 | 220 |
| Senior services | 35 | 122 | 48 | 205 |
| Parks/recreation options and open spaces | 38 | 127 | 62 | 227 |
| Safety (low crime, safe neighborhoods) | 44 | 133 | 56 | 233 |
| Family life | 50 | 114 | 52 | 216 |
| Food availability | 54 | 128 | 38 | 220 |
| Good place to retire | 69 | 126 | 24 | 219 |
| Good place to raise children | 71 | 130 | 23 | 224 |

| Health Factor | Strong | Adequate | Needs Improvement | Total |
|---|---|---|---|---|
| Residents (friendly, supportive, etc.) | 71 | 133 | 22 | 226 |
| Religious/spiritual values | 72 | 122 | 31 | 225 |
| | | | | **N=239** |

## 4. What health education topics would you like more information about? (Choose all that apply.)

Participants were asked to choose any health education topics that they would like to have more information about. The topics that were requested the least number of times included HIV/AIDS, rape/sexual assault, breastfeeding, sexual health/adult pregnancy planning, and domestic/relationship violence, followed closely by teenage pregnancy and then racism. The five topics that were most requested were nutrition/diet, overweight/obesity, physical activity, wellness/disease prevention, and cancers.

**Desired Health Information Topics**

| Answer Choices | Number of Respondents | Percentage |
|---|---|---|
| Nutrition/diet | 78 | 40% |
| Overweight/obesity | 71 | 36% |
| Physical activity | 65 | 33% |
| Wellness/disease prevention | 64 | 33% |
| Cancers | 63 | 32% |
| Aging | 62 | 32% |
| Caregiver stress | 57 | 29% |
| Substance abuse prevention | 55 | 28% |
| Women's health | 54 | 28% |
| Mental/emotional health | 53 | 27% |
| Firearm safety | 50 | 26% |
| Substance abuse treatment | 50 | 26% |
| Bullying | 49 | 25% |
| Diabetes | 47 | 24% |
| First aid/emergency response | 46 | 24% |
| High blood pressure | 44 | 23% |
| Tobacco use/quitting | 44 | 23% |
| Heart disease and stroke | 44 | 23% |
| Child abuse/neglect prevention | 39 | 20% |

| Answer Choices | Number of Respondents | Percentage |
|---|---|---|
| Dental health | 38 | 19% |
| Suicide | 36 | 18% |
| Vaccines/immunizations | 33 | 17% |
| Motor vehicle safety (car seats, seat belts, ATVs) | 32 | 16% |
| Safety (swimming, safe walking, home safety, fire prevention, etc.) | 31 | 16% |
| Infectious diseases (hepatitis, the flu, etc.) | 29 | 15% |
| Fall prevention | 28 | 14% |
| Respiratory disease | 28 | 14% |
| Infant/child health | 27 | 14% |
| Racism | 22 | 11% |
| Teenage pregnancy | 22 | 11% |
| Domestic/relationship violence | 21 | 11% |
| Sexual health/adult pregnancy planning | 17 | 9% |
| Breastfeeding | 16 | 8% |
| Rape/sexual assault | 16 | 8% |
| HIV/AIDS | 10 | 5% |
| Other (please specify) | 9 | 5% |
| | **N=195** | |

*NOTE:* The table above shows the percentage of respondents who selected each answer option. Percentages total more than 100%, as respondents were asked to select multiple answers.

## 5. What are the most serious health issues in Washington County? (Choose up to 3.)

Participants were asked to choose which three health issues in Washington County they considered to have the most serious implications for the community. The three issues that received the least number of votes were low immunization rates, women's and children's health (prenatal and postpartum care), and rape/sexual assault, followed closely by sexually transmitted diseases and then infectious disease (hepatitis, TB, the flu, etc.). The top three issues that received the most votes were substance abuse, unhealthy lifestyle (obesity, lack of physical activity, poor nutrition), and chronic disease (cancer, diabetes, heart disease, etc.), followed closely by mental health and then lack of health insurance.

**Desired Health Information Topics**

| Answer Choices | Number of Respondents | Percentage |
|---|---|---|
| Substance abuse | 124 | 53% |
| Unhealthy lifestyle (obesity, lack of physical activity, poor nutrition) | 96 | 41% |
| Chronic disease (cancer, diabetes, heart disease, etc.) | 96 | 41% |
| Mental health | 74 | 31% |
| Health insurance (lack of) | 67 | 29% |
| Environmental issues (radon, air, water, C8, etc.) | 64 | 27% |
| Tobacco use | 54 | 23% |
| Poverty | 49 | 21% |
| Access to healthcare | 38 | 16% |
| Dental health/access to dental care | 38 | 16% |
| Child neglect/abuse | 37 | 16% |
| Education level (lack of) | 31 | 13% |
| Domestic abuse/violence | 30 | 13% |
| Suicide | 27 | 11% |
| Lack of access to services for seniors | 18 | 8% |
| Injuries (motor vehicle, firearms, drowning, etc.) | 16 | 7% |
| Infectious disease (hepatitis, TB, the flu, etc.) | 13 | 6% |
| Sexually transmitted diseases (STDs) | 12 | 5% |
| Rape/sexual assault | 10 | 4% |
| Women's and children's health (prenatal and postpartum care) | 6 | 3% |
| Low immunization rates | 4 | 2% |
| | **N=235** | |

*NOTE:* The table above shows the percentage of respondents who selected each answer option. Percentages total more than 100%, as respondents were asked to select three answers.

## 6. Please rate the following questions on a scale of 1 to 5, with 5 being the most positive.

Participants were asked to answer eight questions concerning their views on the quality of different aspects of life in Washington County. They rated their answer on a scale of 1 to 5, with 1 being "poor" and 5 being "excellent." There was no comment section available to respondents for these questions. Notably, no question scored a majority of votes in either the "excellent" category or the "poor" category. The last two questions were the lowest scoring of the total eight questions.

» For "Is this community a good place to raise children?" the most votes were under "good" at 36% of respondents, followed closely by 31% voting for "very good."

- The next question, “Are you satisfied with the quality of life in our community?,” followed the same pattern, with 39% in the “good” category and a close 33% in the “very good” category.
- “Is this community a good place to grow old?” was nearly a tie, with 34% voting “very good” and 33% voting “good.”
- The next question, “Is the community a safe place to live?” had a significant difference between the top two votes. “Good” had 42% of votes while the next closest, “very good,” had 28% of votes.
- “Are there networks of support for individuals and families during times of stress and need?” had more votes for “good” at 39% and then 32% for “fair.”
- Leading with a “good” vote of 44% compared to “fair” with 30% was “Are healthy choices available and accessible in this community?”
- “Are you satisfied with the healthcare system in the community?” scored highest with “fair” at 36% and then 30% for “good.”
- Finally, “Is there economic opportunity in the community?” was voted “fair” at 40% and then “good” at 32%.

**Quality of Life Question**

| | 1 = Poor | 2 = Fair | 3 = Good | 4 = Very Good | 5 = Excellent | Total |
|---|---|---|---|---|---|---|
| Is this community a good place to raise children? | 6 | 40 | 85 | 73 | 34 | 238 |
| Are you satisfied with the quality of life in our community? | 5 | 37 | 95 | 80 | 24 | 241 |
| Is this community a good place to grow old? | 7 | 51 | 79 | 80 | 24 | 241 |
| Is the community a safe place to life? | 6 | 45 | 102 | 67 | 18 | 238 |
| Are there networks of support for individuals and families during times of stress and need? | 12 | 75 | 91 | 44 | 13 | 235 |
| Are healthy choices available and accessible in this community? | 10 | 71 | 102 | 43 | 8 | 234 |

| | 1 = Poor | 2 = Fair | 3 = Good | 4 = Very Good | 5 = Excellent | Total |
|---|---|---|---|---|---|---|
| Are you satisfied with the healthcare system in this community? | 34 | 87 | 71 | 42 | 6 | 240 |
| Is there economic opportunity in the community? | 43 | 95 | 75 | 19 | 3 | 235 |
| | | | | | | N=241 |

## 7. What is the zip code of your current home?

The majority of survey respondents, 103 total, chose their zip code as 45750, which is the zip code for Marietta, the largest city in Washington County. It is the county seat, and it hosts a significant number of the county's schools, businesses, and service agencies.

**Zip Code of Respondents**

| Zip Code | Number of Respondents | Percentage |
|---|---|---|
| 45750 | 103 | 48% |
| 45724 | 23 | 11% |
| 45742 | 12 | 6% |
| 45714 | 12 | 6% |
| 45715 | 10 | 5% |
| 45729 | 10 | 5% |
| 45786 | 10 | 5% |
| 45744 | 7 | 3% |
| 45788 | 6 | 3% |
| 45784 | 4 | 2% |
| 45745 | 4 | 2% |
| 45768 | 4 | 2% |
| 45767 | 3 | 1% |
| 45787 | 2 | 1% |
| 45712 | 2 | 1% |
| 45773 | 1 | 1% |
| 45789 | 1 | 1% |
| 45746 | 0 | 0% |

| Zip Code | Number of Respondents | Percentage |
|---|---|---|
| 45713 | 0 | 0% |
| 45734 | 0 | 0% |
| 45721 | 0 | 0% |
| | **N=214** | |

## 8. How do you identify?

Survey respondents were asked to indicate their identity as male, female, or other. The majority of respondents were women, representing 70% of everyone who took the survey. Men accounted for 30% of respondents.

**Gender of Respondents**

| Answer Choices | Number of Respondents | Percentage |
|---|---|---|
| Male | 69 | 30% |
| Female | 163 | 70% |
| Other | 1 | 0% |
| | **N=233** | |

## 9. What is your age in years?

Survey respondents were asked to indicate their age in years. While the age distribution was fairly even, the most identified in the 40 to 54 age range. The least represented groups were those in the under 18 age group and those in the 18 to 25 age group, the numbers of which were nearly identical. The table below shows the well distributed range of respondents.

**Age of Respondents**

| Age Range | Number of Respondents | Percentage |
|---|---|---|
| Under 18 | 6 | 3% |
| 18–25 | 7 | 3% |
| 26–39 | 40 | 17% |
| 40–54 | 68 | 29% |
| 55–64 | 61 | 26% |
| Over 65 | 50 | 22% |
| | **N=232** | |

## 10. Which of these racial/ethnic groups do you identify with?

Survey respondents were asked to indicate which racial/ethnic groups they identified with. The majority identified as white/Caucasian, representing 91% of responses. The closest subsequent response was 5% for "prefer not to answer," followed by a 3% response for African American/black. Although this is a homogenous distribution, it accurately reflects the U.S. Census Bureau race and ethnicity demographics of Washington County.

**Ethnicity of Respondents**

| Answer Choices | Number of Respondents | Percentage |
|---|---|---|
| African American/Black | 8 | 3% |
| Native American | 2 | 1% |
| White/Caucasian | 211 | 91% |
| Prefer not to answer | 11 | 5% |
| Asian/Pacific Islander | 0 | 0% |
| Hispanic/Latino | 0 | 0% |
| | **N=232** | |

## 11. What is your current marital status?

Participants were asked to indicate their current marital status. The majority answer was 74% for married/partnered/cohabitating, with only 12% for divorced and 10% for single. The smallest percentage was 4% for respondents who identified as widowed.

**Marital Status of Respondents**

| Answer Choices | Number of Respondents | Percentage |
|---|---|---|
| Single/never married | 23 | 10% |
| Married/partnered/cohabitating | 171 | 74% |
| Divorced | 28 | 12% |
| Widowed | 8 | 4% |
| | **N=230** | |

## 12. What is your highest education level?

Participants were asked to indicate their highest level of education obtained. The education levels with the least responses were "some high school" and "vocational training," with 4% and 3%, respectively. The remaining responses were distributed fairly evenly. "College degree" received the most responses, with 37% of the total. Tied for second were "high school diploma or GED" and "some college," both with 20%. With a close 16% was "graduate degree or higher."

**Educational Attainment of Respondents**

| Answer Choices | Number of Respondents | Percentage |
|---|---|---|
| Some high school | 10 | 4% |
| High school diploma or GED | 46 | 20% |
| Some college | 47 | 20% |
| College degree | 87 | 37% |
| Vocational training | 6 | 3% |
| Graduate degree or higher | 36 | 16% |
| | **N=232** | |

## 13. What is your current household annual income?

Participants were asked to indicate their current household annual income using the income brackets provided. The responses collected showed a broad representation of the diverse income levels of Washington County residents. The income bracket with 21% of responses was $30,000 to $49,000; this income had the most responses. Tied for second and garnering 17% of responses were $50,000 to $74,000 and "prefer not to answer"; 13% of respondents chose $75,000 to $99,000. Another tie, this time for fourth, were $20,000 $29,000 and Over $100,000, each with 11% of responses. The least chosen response (10%) by a slim margin was Less than $20,000.

**Household Income of Respondents**

| Answer Choices | Number of Respondents | Percentage |
|---|---|---|
| Less than $20,000 | 23 | 10% |
| $20,000–$29,000 | 25 | 11% |
| $30,000–$49,000 | 48 | 21% |
| $50,000–$74,000 | 38 | 17% |
| $75,000–$99,000 | 31 | 13% |
| Over $100,000 | 26 | 11% |
| Prefer not to answer | 38 | 17% |
| | **N=229** | |

## 14. How many people live in your household?

Participants were asked to indicate how many individuals live in their family household. Nearly half of respondents, 42%, indicated their family size was two people; 24% of respondents chose three people, 14% chose four people, and 10% chose one person. Larger households with five or more people were smaller percentages.

**Household Size of Respondents**

| Answer Choices | Number of Respondents | Percentage |
|---|---|---|
| One | 24 | 10% |
| Two | 98 | 42% |
| Three | 57 | 24% |
| Four | 33 | 14% |
| Five | 16 | 7% |
| Six | 4 | 2% |
| Seven | 1 | 0% |
| Eight or more | 1 | 0% |
| | **N=234** | |

## 15. Which of the following best describes your employment status?

Participants were asked to indicate which of the listed choices best describes their employment status. The majority of respondents chose full-time employment at 53%. About one-fourth of respondents, 23%, chose retired. The remainder of choices garnered less than 10% each, including employed part time, homemaker, self-employed, student, out of work, and unable to work/disabled.

**Employment Status of Respondents**

| Answer Choices | Number of Respondents | Percentage |
|---|---|---|
| Employed full time | 123 | 53% |
| Employed part time | 18 | 8% |
| Employed part time, looking for full time | 4 | 2% |
| Self-employed | 9 | 4% |
| Homemaker | 17 | 7% |
| Student | 8 | 3% |
| Retired | 53 | 23% |
| Out of work | 5 | 2% |
| Unable to work/disabled | 9 | 4% |
| | **N=233** | |

## 16. How do you pay for your healthcare?

Participants were asked to indicate the payment method by which they pay for healthcare. An overwhelming 69% reported using private health insurance, and a significantly smaller 25%

reported using Medicate Parts A and B. Medicaid was used by 11% of respondents, followed by 6% reporting they are uninsured and pay cash. Comments left by survey participants included the names of specific health insurance companies. Others commented “employer insured,” “taken out of check,” and “spouse” to specify that their health insurance is provided as a benefit of either their job or their spouse’s job.

**Health Payor of Respondents**

| Answer Choices | Number of Respondents | Percentage |
|---|---|---|
| Pay cash (uninsured) | 12 | 6% |
| Medicaid | 24 | 11% |
| Medicare (Parts A and B) | 54 | 25% |
| Medicare Advantage (Part C) | 5 | 2% |
| Private health insurance | 146 | 69% |
| Veterans Administration | 6 | 3% |
| Indian Health Services | 0 | 0% |
| | **N=213** | |

## 17. How long have you been a resident of Washington County?

Participants were asked to indicate the number of years that they have been living in Washington County. The majority was 71%, who reported they have lived in the county for over 20 years. Residents of 11 to 20 years numbered 12%, and 5- to 10-year residents were 8%. Those living in the area for four years or less reported smaller percentages.

**Length of Residency of Respondents**

| Answer Choices | Number of Respondents | Percentage |
|---|---|---|
| Less than 1 year | 5 | 2% |
| 1–2 years | 8 | 4% |
| 3–4 years | 7 | 3% |
| 5–10 years | 17 | 8% |
| 11–20 years | 27 | 12% |
| Over 20 years | 160 | 71% |
| | **N=224** | |

# VI. 2014–2017 Action Plan and Accomplishments

# VI. 2014–2017 Action Plan and Accomplishments

The following actions were continued by the MHS in response to the 2014 Community Health Assessment and Community Health Council Stakeholder report.

1. Create consistent data sets to understand the trends in our community health needs and the impact of our actions over time.

   Result: Collaborative work with MOV and Washington County Health departments, new more integrative approach to CHNA.

   Result Continued use of survey with community agencies and health entities.

2. Support the Community Health Council.

   Result: Continued provision of space, clerical support and administrative participation.

3. Promote disease detection and prevention in the community.

   a. Offer more prevention and wellness outreach services to local employers (e.g., health screenings, health education, exercise and nutritional services).

   Result: Development of Live Memorial Well, a sub-brand of the Memorial Health System dedicated to wellness and prevention through complimentary or Lifestyle Medicine. Focusing on movement/exercise, healthy eating, learning opportunities and building relationships and sharing within the community.

   Result: Continued outreach clinics and screenings offered in the community. In FY 2016 over 3,200 community members attended screenings held at local businesses, community events and the hospital. Screenings focused on blood pressure, weight, blood sugar, cholesterol, A1C, PSA and multiphasic.

4. Partner with Marietta College and People's Bank to sustain the Hunger Solutions taskforce work to reduce hunger in the community.

   Result: Held first annual Bounty by the River fund-raising event resulting in $22,000 raised. Continued local organizational fund-raising by founding partner organizations with Peoples Bank raising $54,936 and MHS raising $21,775.

Result: Provided $21,748.27 in support of Live Healthy Kids program and $155,936.93 in direct food assistance through SEO Food Bank and local participating food pantries in 2015 and 2016.

5. Support mental health needs in the community.

Result: Developing a strategic partnership with the Washington County Behavioral Health Board to position Memorial Health System as a reliable resource for behavioral health information, education, training and treatment for geriatric behavioral health services.

- » Become the strategic partner for the Mental Health First Aide training offered to professionals and the community.
  - › Mental Health First Aid is a groundbreaking public education program that helps the consumers and professionals identify, understand, and respond to signs of mental illness and substance abuse disorders.

Result: Establish MHS as the Center for Behavioral Health Education for professionals and consumers.

- » Offer quarterly training for providers on mental health topics including Suicide Prevention, Depression in the Elderly, Trauma Informed Care in Outpatient Settings, Managing Difficult Behaviors.
- » Provide quarterly Lunch and Learn education series.
- » Establish a monthly community lecture series “Changing Perceptions about Mental Illness”.
- » Identify support groups needed in the community such as Alzheimer Support Group, Intensive Outpatient graduate support group, Bariatric Support Group, Psychosocial Education Group.

6. Continue to provide smoking cessation program to the community.

After an MHS executive review of the findings the following actions are added as new endeavors to meet the health needs of the community based on the 2014 Community Health Needs Assessment.

7. Continued Development of the Contact Center.

a. Add nurse triage

Result: Nurse Triage Line.

- » The nurse triage line is staffed 24 hours and open to the public.
- » The nurse triage line also serves as an after-hours nurse line for 50 PCPs and specialists.

- » It averages 3038 incoming calls and 125 triages per month and has participated in the prevention of 258 unnecessary ED visits last year.

Result: Scheduling Post Discharge Appointments.

- » The Contact Center started a pilot in January, 2017 to schedule patient's follow-up appointments prior to discharge.
- » Currently, the Contact Center is scheduling for 11 clinics and over 20 providers.
- » The pilot remains successful with expansion to more clinics regularly.

Result: Discharge Calls.

- » The Contact Center conducts 100% of discharge calls including those for inpatient stays and outpatient procedures with an average of 80% contacted.
- » The Contact Center increased the percentage of post ED visit calls attempted from 6% to 97% over the last 12 months.
- » The Contact Center Conducted over 71,000 follow up calls over the last 12 months with an average of 6,000 calls monthly.

Information received from follow-up calls is used to trend patient understanding of discharge instructions and other data points. Results are shared with departments monthly.

8. Develop a regional network to manage population health.

a. Assist community and Post-Acute Care settings in transition to ACO.

Result: MMH leading a PAC coalition that meets monthly to work on patient care coordination and transition opportunities along with quality incentives which include metrics for ACOs and the five star quality report based on CMS requirements. This group also works on other patient care needs or opportunities based on case review and reported concerns.

Result: MMH continues to support the Community Based Care Transition Program with our local Area On Aging Agency-Buckeye Hills. This includes extending this community service after the CMS grant has concluded. Our program was rank 2nd in nation based on metrics and results shared by all 175 programs nationwide. We are continuing to work on maintaining this program once the CMS project concludes.

Result: Clinisync is helping MHS and our community PAC ensure electronic access and sharing of the EHR.

b. Reduce Hospital Readmissions.

Result: Readmission Team.

» Memorial Health System is focused to reduce readmissions that are preventable. The Readmission Subcommittee was formed and chartered in June 2016. This is a multidisciplinary subcommittee/team which includes representatives from Medical Staff; Care Management; Clinic Operations; Quality; Nursing; Home Health is reviewing data and developing a multi-pronged approach to reduce readmissions. Key areas of focus are as follows:
    - › Patient/family: providing education and tools on key areas of health concerns such as disease management, medications, etc.;
    - › Clinics/physician offices: following chronic patients and those recently discharged closely, education, etc.;
    - › Medical Staff/Nursing: ongoing education, working with IT on developing appropriate notification of recent discharge, case reviews, etc.;
    - › Care Management: utilization of appropriate level of care and resources are provided for patients going home such as community resources, home health, etc.;
    - › Numerous others are involved with this high priority such as Educational Services, Quality, IT, Contact Center, Marketing, etc.

Result: Creation of Care Coordinator position in outpatient clinics.

» Contact admitted patient after discharge following TCM guidelines (48 business hours) to check patient status, answer questions, and address any barriers.

» Reinforcing the Zones for Readmission initiated on the Inpatient side, when appropriate.

» Tracking patients with frequent and inappropriate ED utilization and initiating conversations about proper utilization of health system resources.

c. Chronic Disease Management.

Result: Conducting pilot program in 2017 with MHS diabetic employees to develop protocols and program that can be replicated for other diseases and other segments of the community.

Result: Creation of Care Coordinator position in outpatient clinics.

» Initial focus of the Care Coordinator position is assisting with improving the management of our diabetic population. Includes:
    - › Identifying poorly managed patients.

- Identifying additional diabetic resources that may be beneficial for the patient (ex. Diabetic Education Center, Evidence and Community Based Diabetic Education classes).
- One on One education in the office.
- Assisting the provider and staff to address all items in the diabetic bundle and properly document.

» A Hypertension Bundle is being developed in 2017, the Care Coordinators will assist with improving the management of this chronic disease population.

» Assist with improving the care of other chronically ill patients as needed.

9. Provide insurance alternative designed to reduce healthcare spending of local businesses through shared risk model.

   Result: We have not been able to execute on this action item due to resources concentrating on our ACO development and work.

10. Assist community members in signing up for insurance through the Affordable Care Act.

    Result: Our staff routinely answer community members' questions about which insurances Memorial Health System is in network with. We also refer community members to Kathy Wolfe-Crouser, Certified Health Navigator, at Washington Morgan Community Action for help with signing up.

11. Develop physician succession plans to ensure continued access to care in light of baby boomer retirements.

    Result: ECG was engaged by Memorial Health System to assist in the development of a physician needs assessment based on the healthcare needs of its medical service area. This report includes both an analysis of MHS's service area and specific recommendations regarding appropriate staffing levels in a variety of medical specialties. The assessment may serve as a guide for strategic staff planning for MHS and contribute to its effort to document community need for physicians, as is required by federal physician recruiting regulations. This report in combination with internal interviewing regarding impending retirements provides the system's plan for the replacement of retiring physicians in alignment with the community needs.

12. Expand Breast Cancer treatment.

Result: We are in the early stages of developing an outreach clinic in Ripley WV with partner Jackson General Hospital. Goal = increase access to patients in our health system service areas.

Result: Began a multi-disciplinary breast clinic in 2016; goal = increased access and throughput for breast cancer patients.

Result: Advanced INTRABEAM treatment available for qualifying patients; intraoperative radiotherapy offers targeted and localized treatment resulting in faster treatment courses and reduced side effects.

Result: Additional MD/Radiation Oncologist joining the MHS team summer 2017; Goal = increased access and treatment planning turnaround time for patients.

13. Expand cardiovascular services.

Result: Increased hours for clinic availability to provide additional appointments. Addition of a fourth Interventional Cardiologist.

Result: Work toward recruitment of EP physician that can provide full time service in the community.

Result: Continued outreach for cardiology clinic services. Community education programs and Health Fair attendance and screenings provided by cardiology representation.

Result: Incorporation of cardiac rehabilitation into the service line. We are hoping that by having them under the cardiology service line we can work toward a seamless experience for patients and also have a better buy-in from the physicians for ordering of rehab.

# VII. Health Need Priorities 2017

# VII. Health Need Priorities 2017

The following priorities were identified by the hospital's administrative team based on the Community Health Needs Assessment report:

1. Cancer and heart disease are leading causes of death.
2. Obesity, poor nutrition, lack of physical exercise, and smoking put our population at higher risk for chronic diseases.
3. Lack of mental health and addiction services.
4. Access to healthcare has improved, but with aging physicians both succession planning and improved access to healthcare remain important.
5. Support of the growing elderly population, particularly grandparents as primary caregivers to children.
6. Improvement in per capita income and reduction in poverty.

MHS's action plan addresses many of these priorities. The hospital has limited resources and/or ability to address all of the needs of the population, however, as well as a limited ability to impact economic development and improve the standard of living. In addition, many health-related issues are raised in the report that MHS cannot impact at this time:

1. Addiction services
2. Dental care
3. Specialized pediatric and neonatal care
4. Unintentional and intentional injury
5. Child custody, neglect, and abuse

# VIII. 2017–2020 Action Plan

# VIII. 2017–2020 Action Plan

The following actions will be continued by the MHS in response to the 2017 Community Health Needs Assessment:

1. Become an integrated regional provider to manage population health in a broader geography.
    a. Assist regional and post-acute care settings.
    b. Reduce hospital readmissions.
    c. Engage in chronic disease management.
2. Continue developing the pilot program for MHS diabetic employees to develop protocols and a program that can be replicated for other diseases and other segments of the community.
3. Continue developing the hypertension bundle to assist with improving the management of this chronic disease population.
4. Continue to provide a smoking cessation program to the community
5. Support mental health needs in the community.

After an executive review of the findings, the following actions are added as new endeavors to meet the health needs of the community based on the 2017 Community Health Needs Assessment:

1. Explore strategic partnerships to enhance clinical offerings in the region such as cardiovascular care.
2. Explore affiliations to boost regional physician recruitment/retention, enhancing the diversity and quality of provider services.
3. Provide an insurance alternative designed to reduce healthcare spending of local businesses through a shared-risk model.
4. Identify opportunities to improve physical activity levels in the community, such as MHS-sponsored bicycle paths.
5. Track and reduce mental health–related incidences of patient-on-staff physical violence at MHS facilities.
6. Develop resources to track and support grandparents serving as primary caregivers to children in the community.

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