LOGAN COUNTY

Community Health Needs Assessment

2020 – 2022

Update

Logan County
Community Health Needs and Risk Assessment

2020 Update

Project Management
Mary Rutan Foundation
Tammy Allison, Chief Operating Officer
Logan County Health District
Dr. Boyd Hoddinott, Health Commissioner
Donna Peachey, Deputy Health Commissioner

Data Analysis
Dr. Sherri Quinones, Capital University

Contact Information

Tammy Allison
Chief Operating Officer
Mary Rutan Foundation
205 Palmer Rd
Bellefontaine, OH 43311
(937) 599-7003

Donna Peachey
Deputy Health Commissioner
Logan County Health District
310 S. Main St.
Bellefontaine, OH 43311
(937) 592-9040

This report was prepared under the direction of Logan County Health Risk and Community Needs Assessment Committee. The following agencies and organizations were instrumental in the creation, implementation and funding of this report.

Adopted February 2021

Table of Contents

Introduction 2
Community Overview 9
Priority 1 - Mental Health 17
Priority 2 – Substance Abuse 25
Priority 3 – Healthy Living 35
Priority 4 – Safe and Healthy Families 48
Priority 5 – Housing and Homelessness 57
Priority 6 – Resources and Awareness 61
Demographics/Social Determinants 69
Conclusions/General Findings 76

Introduction

Purpose of Update

The purpose of the 2020 update was threefold. First, a periodic update is needed in order to assess community needs and target resources. Secondly, it was decided to do an update in 2020 to align with the state health assessment. Finally, because of major changes in 2020 due to COVID-19, an update was needed.

Description of Priorities

Based on previous Community Needs Assessments and discussion within agencies, Logan County outlined a number of distinct priorities. These include mental health, substance abuse, healthy living, safe and healthy families, housing and homelessness, and resources and awareness.

Mental Health. Mental health issues, specifically rates of depression and anxiety among younger adults, have been on the rise in recent years. The 2018 Community Needs Assessment confirmed this trend, along with increases in suicides in the local school system. The challenge is to make sure that the capacity and resources are there to handle an expected continued increase in need for mental health services.

Substance Abuse. The opiate epidemic has been an ongoing issue in Ohio and in Logan County. In the 2018 Community Needs Assessment, a portion of respondents indicated that they knew of someone using heroin. Similar to mental health, the issue is an even greater concern among young adults and teens and the challenge is to make sure that the capacity and resources are there.

Healthy Living. The priority of healthy living was noted because of a relatively high level of obesity and other health-related issues. It was hoped that with improved economic conditions and increased availability in 2018, people would have more resources to purchase foods higher in nutrition and lower in calories. This was not the case, however. The rate of obesity in the county, and dealing with preventative health issues related to obesity, has continued to be a priority that needs to be dealt with.

Safe and Healthy Families. The priority of safe and healthy families includes both safety and health. One way to make sure that Logan County is a thriving community is to make sure residents feel safe and that they have the resources they need to have healthy families. Safety issues can be monitored

by overall crime rates (violent and property crimes) and rates of maltreatment of youth (i.e., child abuse) and domestic violence. Maltreatment of youth in particular is a major concern. Two health issues to be addressed are access to affordable medical care and insurance. With the Affordable Care Act, some that had not previously had insurance were given the opportunity while others were left with skyrocketing deductibles and monthly costs that made healthcare unaffordable. Tracking the access to affordable healthcare in recent years is essential to having healthy families.

Housing and Homelessness. In order to have a healthy community, Logan County residents need a safe and affordable place to call home. It is a priority to make sure that there are available and affordable housing options and that any that are faced with homelessness have resources to turn to.

Resources and Awareness. Where do people get their information? Are residents using the resources that are out there? This priority centers on making sure the 'message is getting out' and that the resources are being used.

Demographics and Social Determinants. It is noted that demographics and social determinants interact with all of the priorities listed above. Economic and social conditions affect the health and safety of residents and affect mental health and amount of substance abuse. Although economic conditions in Logan County remained relatively stable from 2018 to 2019, the conditions in 2020 have been volatile.

Methodology

The 2020 update was created from a mix of sources. First of all, previous surveys and available data was used to create a 2018 baseline. For the 2020 update, secondary data sources were used along with a condensed online survey, a more in-depth survey given to a limited number of respondents, and information from a few targeted groups.

Previous Surveys. Previous survey data, referenced in this report, was obtained from the full-scale 2018 survey report. In 2018, a comprehensive survey was distributed to a representative sample of households in Logan County. The full report from this survey is available on the Logan County Health District (www.loganhealth.org) and Mary Rutan Hospital (www.maryrutan.org) websites.

Current Secondary Data Sources. The following secondary data sources were used. Sources are listed according to the main priority that was addressed. A few sources fell into a 'general' category or were not able to be placed under one of the priorities. They are listed under 'other.' In some cases, sources are listed under multiple categories.

Table 1: Secondary Data Sources

Mental Health	*Logan County Health Department Suicide Data* *Mary Rutan Hospital Treatment Data* *Mental Health Services Data from TCN Behavioral Health* *Community Health and Wellness Partners Treatment Data* *Logan County Public School District Suicide Screening Data*
Substance Abuse	*EMS Data on Naloxone Administration and Narcan Use* *Information from Medication Take Back Events* *County Level Prescription Report Data from Ohio Board of Pharmacy* *Logan County Health Department Data on MAT Use, Overdose, Drug-Related Deaths* *Mary Rutan Hospital Treatment Data* *Child Protective Services Data on Substance Abuse Related Cases* *Community Health and Wellness Partners E-Cigarette Data* *Logan County Public Schools E-Cigarette Data*
Healthy Living	*Mary Rutan Hospital BMI Data* *Community Health and Wellness Partners BMI Data* *Mary Rutan Hospital Treatment Data* *Information from Dental Clinics* *Logan County/Ohio Department of Health/CDC COVID-19 Data*
Safe and Healthy Families	*National Incident Based Reporting System (NIBRS) Crime Data* *Bellefontaine Police Department Incident Report Data* *Logan County Department of Job and Family Services Public Assistance Data* *Kids Count Data Center, Kids Count Fact Sheet* *Ohio Department of Health Immunization Data*
Housing/Homelessness	*US Census Data* *Data from Logan County Homeless Shelters*
Resources and Awareness	*Appalachian Rural Health Institute Report* *United Way Report on ALICE Households* *Logan County Department of Job and Family Services Medicaid Eligibility Information* *EMS Runs from Logan County EMS* *RTC Services Data on Transportation Runs* *Logan County 211 Report*
Other	*US Census Data* *Logan County Health Rankings* *Talk Poverty Data* *US Census Data* *CHWP Social Determinants of Health Information* *Ohio Department of Job and Family Services Unemployment Statistics*

Fall 2020 Condensed Survey. An online condensed survey was given to a number of community groups. Respondents were asked to rank the following needs in the community from least to greatest – housing and homelessness, access to resources, obesity, substance abuse, maltreatment of children, workforce development, and mental health. They were also asked if any of the following – transportation, housing, child care, medical services, job readiness,

and mental health and addiction – were barriers that they see in the community. In addition, they were asked open-ended questions about strengths (what the community is doing well), challenges (what they would change), and challenges they have faced as a result of COVID-19. The following are responses by group and length of time in Logan County:

Table 2: Responses to Condensed Survey

	Number	Percent
Total	**158**	
Years in Logan County		
Less than 1	*4*	*2.5*
1-5	*18*	*11.4*
6-10	*19*	*12.0*
11-15	*9*	*5.7*
More than 15	*106*	*67.1*
No Answer	*2*	*1.3*
Group		
Hispanic Community	*8*	*5.1*
General Public/Facebook	*101*	*63.9*
Chamber of Commerce	*9*	*5.7*
Business Leaders	*13*	*8.2*
Schools	*22*	*13.9*
Disabled Community	*5*	*3.1*

The majority of responses were from people living in Logan County for more than 15 years and the general public via Facebook. The numbers of responses for many of the groups were too small to make comparisons between groups meaningful (most had less than 30 respondents), so data will be presented in aggregate.

Fall 2020 Full Survey. A longer version of a survey was also given to a number of respondents in the fall of 2020 – more people than the condensed survey but less than the 2018 survey. The full survey included information on demographics as well as a number of questions about all of the priorities. The following details the number of survey responses by group:

Table 3: Responses to Fall 2020 Full Survey by Group

	Number	Percent
Total Received	**396**	
Facebook	*115*	*29.0*
Food Truck/Pantry	*172*	*43.4*
Medication Take Back	*4*	*1.0*
Seniors	*25*	*6.3*
Young Adult Population	*44*	*11.1*
Black Population	*7*	*1.8*
Disabled	*29*	*7.3*

The following details the percentage of responses by various demographic characteristics:

Table 4: Responses to Full Survey by Demographic Characteristics

	2018 Survey Percentages (N = 1349)	Fall 2020 Survey (N = 396)	
		Number	Percent
Gender			
Male	*25.6*	*79*	*22.2*
Female	*68.4*	*274*	*77.0*
Other	*NA*	*3*	*.8*
Age Group			
18-34	*6.5*	*61*	*17.1*
35-49	*13.3*	*98*	*27.5*
50-64	*33.7*	*105*	*29.5*
65+	*46.5*	*92*	*25.8*
Ethnicity			
White/Caucasian	*96.4*	*335*	*93.6*
African-American	*0.7*	*12*	*3.4*
Asian	*0.3*	*1*	*.3*
Hispanic	*0.1*	*2*	*.6*
Other or Unknown	*2.5*	*8*	*2.2*
Marital Status			
Married	*60.5*	*206*	*57.5*
Divorced or Separated	*11.6*	*72*	*20.7*
Single	*11.9*	*50*	*14.0*
Widow/Widower	*16.0*	*28*	*7.8*
Education			
Less than High School Diploma	*3.3*	*21*	*5.9*
HS Diploma/GED	*35.9*	*133*	*37.3*
Some College	*25.4*	*45*	*12.6*
Vocational/Trade	*NA*	*25*	*7.0*
College Graduate	*35.3*	*133*	*37.3*
Household Income			
Less than $15,000	*9.9*	*81*	*23.2*
$15,000-$19,999	*8.1*	*23*	*6.6*
$20,000-$29,999	*12.5*	*39*	*11.2*
$30,000-$49,999	*20.8*	*63*	*18.1*
$50,000-$74,999	*22.2*	*51*	*14.6*
$75,000-$99,000	*10.4*	*35*	*10.0*
$100,000 or More	*16.1*	*47*	*16.3*

Note: Percentages are out of those that provided responses. In the 2018 survey, there was an option of 'live with partner' in marital status. These responses were included under 'single.'

As with previous surveys, respondents were more likely to be female and older. However, as noted in the comparison, there was a much more balanced representation of all age groups than past surveys. Although younger adults were underrepresented, the participation rate was better than expected. Responses were fairly representative of Logan County in terms of racial and

ethnic breakdown. Respondents came from a variety of education levels and income levels, and there was a mix of various employment statuses. Since the methodology of this survey was different than previous community assessments, responses are not fully comparable.

A breakdown of responses to the 2018 survey is included to assess the similarities and differences in the respondents. The current survey had similar representation by gender, race/ethnicity, and education levels. However, the current survey had a greater percentage of young adults, a greater percentage of respondents who were divorced or separated, and a greater percentage of people in the lowest income bracket (under $15,000). These differences should be considered when comparing information from the two surveys.

The following details the percentage of responses by location:

Table 5: Responses to Full Survey by Location

	2018 Survey Percentages (N = 1349)	**Fall 2020 Survey (N = 197)**	
		Number	**Percent**
Census Tract			
38 – Rushsylvania and West Mansfield	*8.3*	*14*	*7.1*
39 – Huntsville	*11.2*	*26*	*13.2*
40 – Indian Lake	*7.0*	*6*	*3.0*
41 – Indian Lake-Lakeview	*4.7*	*6*	*3.0*
42 – Russells Point	*3.8*	*7*	*3.6*
43 – DeGraff, Quincy, and Lewistown	*10.5*	*11*	*5.6*
44 – Bellefontaine (west)	*10.8*	*15*	*7.6*
45 – Bellefontaine – (central)	*7.0*	*18*	*9.1*
46 – Bellefontaine (east)	*14.7*	*30*	*15.2*
47 – Zanesfield and East Liberty	*9.6*	*15*	*7.6*
48 – West Liberty	*12.5*	*22*	*11.2*
No Census Tract Info Coded	*NA*	*27*	*13.7*

In 2018, surveys were mailed out already coded with census information, so information was available on all survey respondents. In the 2020 survey, respondents were asked to place an X on a map where they lived. A number of respondents did not answer the question (N = 199) and a handful of the responses were not coded by census tract (N = 27). Of those that provided a response, trends were similar between the two years (e.g., largest numbers in Bellefontaine census tracts). However, because of non-response, the numbers were too small to make meaningful comparisons of survey data by census tract.

In addition, in the 2020 survey, there were also a handful of respondents that indicated that they did not live in Logan County (N = 30). These

respondents did not indicate a specific location (i.e., are not included under 'other' above, but rather, are part of the missing data). Because of the fact that they were completing a Logan County survey and most likely were familiar with Logan County services, the responses were included. In addition, a handful of these respondents were from the disabled group. Because those with disabilities may be more likely to need services, it was important to include them.

Fall 2020 Targeted Groups. In the fall of 2020, there was a greater effort to target a number of specific groups. These included two racial/ethnic groups; Hispanic and African-American along with a Young-Adult group and the Amish community. Due to COVID-19 only a limited amount of information was able to be gathered through face-to-face conversations. A highly-engaged group of Young Adults took part in the only focus group held. A small number of African-American residents completed the full survey. However, the number of individuals who voiced their opinion was great than those who completed surveys in 2018. Additionally, there was a larger representation of the Hispanic population as well, over the 2018 survey. Unfortunately, despite numerous attempts, and partially because of challenges regarding connectivity, information was only able to be gathered from one member of the Amish community.

Community Overview

Logan County, seated in west central Ohio, is a rural farming and manufacturing community located approximately 60 miles west of the state capital, Columbus. Logan County covers a span of nearly 500 square miles of primarily agricultural land. In 2019, the United States (U.S.) Census estimated a total population of 45,672. The county seat, Bellefontaine, holds the largest population in the county with 13,249 residents. Bellefontaine's population is projected to slightly increase over the next few years, while Logan County's population is expected to decrease.

The major employer is manufacturing, followed by agriculture, administrative, waste services, health care, social assistance, and education. People travel between 15 and 29 minutes to work, with the average being 21.9 minutes. Over the past few years, improvements have been made to the local public transportation system. In 2020, RTC increased their number of drivers and vehicles and extended their hours of operation from 7am-5pm to 5:30am-10pm. Additionally, Superior Transportation resumed operations in 2020, and 'Ride Connect' serves as a new volunteer driver program that is ready to go. Efforts continue to make public transportation more accessible and affordable.

Logan County has a diverse population in regards to socio-economic, religion, agriculture, and resort communities which have different norms, values, and attitudes. Various social determinants of health include employment status and workplace safety, access to housing and services, educational attainment, income level, affordable healthcare, and food insecurity. In 2018, there were 838 total employer establishments in Logan County, and an annual unemployment rate of 3%, which was lower than Ohio's 4%. In January 2020, the unemployment rate was 4.7%, and, as a result of COVID-19, spiked to 30.1% in April 2020. By July 2020, the unemployment rate resiliently declined to 7.3%, however, was still 2.6% higher than in the beginning of 2020. By October, the level had decreased to approximately 4%, approaching pre-COVID norms. The 4 largest employers in Logan County are Honda East Liberty (2750), Midwest Express (1158), Honda Transmission (1144), and NEX Transport (600).

Considering area housing units, in 2019, there were 23,399 total housing units in Logan County. Furthermore, Logan County Chamber's 2020 economic development strategy identified the top 4 priority needs as housing, broadband, workforce development, and infrastructure. To facilitate the county's economic growth, there is an essential need to attract additional housing and to connect Logan County students and local job seekers with local job opportunities. There is also a need to increase natural gas capacity to allow for new development and increase access to water/sewer infrastructure. Finally, expanding the

economic base and addressing inadequate internet connectivity serve as key priorities in the plan.

There are four school districts, and each district encompasses several small communities. There are 7,625 students enrolled in Logan County's 15 public schools. The average high school graduation rate for 2019/20 was 95.75%, which decreased from 96.65% in 2018/19. Although this is still higher than the Ohio graduation rate, 83.5%, the decrease is likely due to challenges presented with COVID-19. Ninety-one percent of Logan County's population aged 25 years or older have either graduated high school or completed a GED equivalency. A much lower percent, 16%, have obtained a Bachelor's degree or higher. Furthermore, 23% of individuals with less than a high school education are in poverty, compared to only 4% of those with a college degree. According to the 2019 Census economic analysis, Logan County's median household income in 2018 was $55,150, with 13.4% of the population living below the poverty level.

When observing racial composition, Logan County is a predominately white community, comparable to the state of Ohio. In 2019, census estimated that 94.7% of residents designate white as their race. Black or African Americans are the next largest racial group, making up 1.8% of the population. When comparing poverty by race, the White poverty rate is 13%; Black is 14%; American Indian is 4%; Asian is 38%; and Hispanic is 21%.

According to 2019 U.S. Census data released in the American Community Survey, the median age for Logan County is 40.8 years and for Ohio is 39.3 years. Approximately one-quarter of the population is under the age of 18 and a little over half the population are ages 24 to 64. A very small percentage, only eight percent, of young adults are ages 18 to 24. Data also shows that 8% of adults under the age of 65 are without health insurance, which is a barrier to accessing essential health care and to maintaining financial security.

There are over twenty parks that provide residents with recreational opportunities, with nine of those having designated walking trails. The Indian Lake State Park provides a walking and bike path that runs along the edge of Indian Lake midpoint between Russells Point and Lakeview. The newest fitness project is the 18-mile bike trail expansion, Simon Kenton All-Purpose Bike Path, allowing bicyclists to travel between Cincinnati and Bellefontaine. According to the bike path data for Logan County, 2020 reflected a 93% increase in activity compared to 2019. There are also over ten fitness-related facilities located within the county, along with a ski resort, public pool, recreational lake, bowling lanes, golf courses, and horseback riding. Indoor opportunities for fitness during inclement weather are increasing, however, cost-free options remain limited. Additionally, many of the county's recreational opportunities require

transportation for the majority of residents. Fresh produce is available in the summer at two farmers' markets in Bellefontaine and one in Indian Lake. Grocery stores are available in most communities, although a few of the villages do not have grocery stores and residents would be required to travel to obtain food. In 2019, the food insecurity rate was 13%.

As the sole community hospital in Logan County Ohio, Mary Rutan Hospital's primary service area is identified as Logan County, which includes an inpatient market share in 2019 equal to 26.05%. Note that the inpatient percentage does not include those patients that are admitted as observation status. Outpatient (including clinics, radiology, lab, surgery, therapy, urgent care), observation and emergency department market share for 2019 were equal to 54.44%.

As of September 2020, there were 31,731 registered voters in Logan County, out of a population of 45,858 residents (2010 U.S. Census). This reflects a 69.2% registration rate for Logan County. In 2019, there were 30,891 registered voters and 7,603 actual voters in November. In 2018, there were 31,663 registered and 16,782 voters. In 2017, there were 31,274 registered and 9,134 voters, while the last general election in 2016 reflected 30,684 registered and 22,019 voters.

Ohio Department of Health Vital Statistic's preliminary data registered 535 births of Logan County residents in 2019. The infant mortality rate (deaths per 1,000 live births) for Logan County (9.33) exceeds the state rate (7.0), with Ohio ranking 47th in the nation. Further, 503 deaths were recorded within Logan County in 2019. The following chart provides 2019 leading causes of death for Logan County residents occurring anywhere in the state of Ohio:

Chart 1: Leading Causes of Death for Logan County Residents

The CDC Community Health Profile lists adult diabetes, obesity, preterm births and syphilis the county's highest factors for morbidity, and adult physical inactivity and teen births as the largest health behavior challenges.

Sources: Logan County Health District, Mary Rutan Hospital, Logan County Chamber of Commerce, US Census Bureau, Center for Community Solutions, Network of Care, County Health Rankings & Roadmaps (Robert Wood Johnson Foundation), Town Charts, Health Policy Institute of Ohio, BRFSS, CDC.

Strengths/Assets

One strength of Logan County is its size. It's a smaller, relatively rural community which makes it easier for people to form social connections and relationships. The county seat of Bellefontaine, however, is large enough to have the major resources that are needed by residents. There is a major hospital, Mary Rutan Hospital, as well as 211, resource information services, mental health services, transportation services, and easy access to schools, libraries, supermarkets, and more.

Another strength of Logan County is its proximity to the major metropolitan area of Columbus. Logan County is approximately an hour drive to one of the largest cities in the U.S. (#14 according to www.census.gov).

In the condensed community survey, respondents were asked what they thought the community was 'doing well.' Some of the responses are as follows:

- ***Many responses on improvement of the downtown***
- ***Many responses in revitalizing small businesses and economic growth***
- ***Many responses promotion of services and communicating*** *– healthcare, engagement with young adults, mental health services, providing access to free/low cost food/groceries, homeless shelters and food distribution*
- ***Many responses on the spirit of cooperation that exists across multiple entities***
- *Community members devoted to each other*
- *The community is filled with faithful people who desire the best for each person*
- *The community is quick to rally around those in need*
- *Good treatment of the immigrant*
- *Community engagement/events*
- *Caring (resource, pride, revitalization)*
- *Providing a community culture of safety and well-being*
- *Continuing to improve, especially economically, in spite of difficult circumstances*
- *Community policing*
- *Repaving roads, bringing community together*
- *Many opportunities for fitness*
- *Generous givers/philanthropists and that the community has robust support for its charities*
- *Assisting children with special needs and providing food to families in need*
- *We've made great strides in the battle against opioids*

Responses of young adults in the focus group conducted were similar. They mentioned the growth of businesses and downtown Bellefontaine as well as the 'salt of the earth people that live here.'

Challenges

Logan County also has some challenges however. Some of these include an aging population, opiate use, obesity, and some transportation issues in rural areas.

Aging Population. One of the challenges mentioned in the 2018 report was that the population was aging. At first look, this was not seen in the revised census data. However, the '65+' population is not a homogenous group. Health care costs associated with persons 65-70 are much less on average than for those 75+. It is worth it to break down this population in order to plan for possible increased costs/challenges in the future.

Opiates. Another challenge mentioned in the 2018 report is opiate use. As in many other areas in Ohio, opiates have become the 'drug of choice' and are truly considered an epidemic. Logan County has been battling the opioid crisis for years and will continue to for years to come.

Obesity. Another issue that has been raised repeatedly is the issue of obesity. Considered an 'epidemic' by many sources, Logan County is one of many areas of the country where many do not make healthy eating choices and struggle with weight gain. Obesity is an issue within the healthcare system because of the many health issues that it entails.

Transportation. Rural areas do not have a lot of access to public transportation. Logan County is no exception. The county has made some strides recently, but making sure that residents have the transportation available to take advantage of any needed resources is a challenge.

In the condensed community survey, respondents were asked what they thought they would change, or challenges that the county faces. Some of the responses are as follows:

- ***Many responses on transportation***
- ***Many responses on an increase in affordable housing***
- ***Multiple responses on fighting drug use and mental health issues***
- ***Multiple responses on increased employment***
- ***Multiple responses on people maintaining property***
- ***Multiple responses on COVID (e.g. mandating masks)***
- ***Multiple responses on leadership (e.g., comments about the 'good old boys club')***
- *Communication between various systems*
- *Transition to a county wide EMS system*
- *More police*
- *Increased healthy restaurants/grocery options*
- *More support for veterans and homeless*
- *Update Hi-Point Village shopping area*

- *More outreach from local government/authorities*
- *More diverse jobs (rely too much on Honda)*
- *Rural connectivity, Citywide fiber access*
- *No truck and large vehicle parking downtown*
- *Address roads and street infrastructure*
- *Cut gas prices*
- *Feeding children who go without*
- *A Humane society to help with homeless animals*
- *Get people off unemployment and make them work, more incentives to work*
- *I would love to see our community members embrace a wider perspective. I am concerned by the polarity and animosity directed toward those whose ideas are different.*
- *Rid our community of systemic racism by allowing ALL groups right to protest and live their best lives without worrying about how people will discriminate against them*

One respondent wished they could 'wave my magic wand and make us all wake up from the 2020 COVID nightmare.'

Young adults in the focus group had some of the same answers. They mentioned the need for parent education as well as the availability of jobs and the accessibility of mental health and addiction services. They mentioned that things they would change included more affordable housing, childcare, better Internet connectivity, and activities for youth. In fact, the main difference between this group and the responses on the condensed survey was that the number one challenge listed was child care.

Possible Impacts of COVID-19

The largest challenge in 2020 is COVID-19. Impacts from COVID-19 are far-reaching. The pandemic has likely implications for the county in all of the various priorities – mental health, substance abuse, healthy living, safe and healthy families, housing and homelessness, and resources and awareness.

Mental Health. COVID-19 has both direct and indirect effects on mental health. There are rising suicide rates and rising rates of depression and anxiety. The increases are a direct result of dealing with health issues from the virus and indirect result of dealing the effects of the shut-downs. Because of the shut-downs, there is an increase in isolation, loss of economic resources, and an exacerbation of family issues (e.g., domestic violence, child abuse, substance abuse) which, in turn, can have a detrimental effect on mental health.

Substance Abuse. One factor behind substance abuse is mental health issues. The fact that there is a rise in rates of depression and anxiety with COVID-19, along with the fact that opiate use and a rise in vaping among young people were listed as an issue prior to the pandemic, has likely led to a rise in substance abuse.

Healthy Living. There are, of course, health impacts with the pandemic. As of the end of November, 23 deaths have been attributed to COVID-19 (most extended care facilities), and the number is climbing with increased community spread. With over 2,000 infected since March 2020, many more will have lasting health issues.

Safe and Healthy Families. Although the overall crime rate has gone down likely as a result of people being at home, because of economic conditions, people may become more desperate. It is also more difficult to provide resources. Many social services agencies went all, or largely, online during 2020. With some not having access to reliable Internet connections, combined with job loss, both safety and health resources are at risk. In addition, with COVID-19, many schools have provided education remotely, increasing the need for childcare availability for working parents.

Housing and Homelessness. The pandemic means more people are out of work both because of health issues and because of businesses being closed or shut down. However, the mandate on evictions may have temporarily helped with the impact of COVID-19 on homelessness. The problem is that some may be so far in arrears in rent and/or mortgage that when the ability to evict is resumed, Logan County, along with many other areas, may see a big rise in homelessness.

Resources and Awareness. Because of COVID-19, it is more difficult to provide resources and make people aware of resources in a safe way. A small percentage are still without high-speed Internet access. Because of the fact that a lot of resources are now only available online, lack of Internet access makes awareness and availability of those resources difficult.

Demographics/Social Determinants. Social determinants of health deals with a variety of demographic factors behind health outcomes. The biggest of these is income. COVID-19 has definitely had a large economic impact not only in the US and in Ohio, but in Logan County. In the county, most employment was from Honda. As in the rest of the country, the unemployment numbers are extremely volatile, but because so much employment is centered in one source, Logan County has had more volatility than other areas.

Community Opinion. In the condensed community survey, respondents were asked about the impact of COVID-19. Some of the responses are as follows:

- ***Many responses on economic impacts/job loss***
- ***Many responses on mask use and social distancing (following rules)***
- ***Many responses on mental health issues (e.g., depression, loneliness)***
- ***Many responses on child care issues and difficulty seeing family***

- *As an essential worker in healthcare my exposure rate is highly increased. Stress and fatigue are very high*
- *More stress at work, finding childcare*
- *Lack of concern from public leaders*
- *Being able to socialize and attending cultural and athletic events*
- *Community attitude*
- *Dwindling freedoms and accuracy of COVID information*
- *Don't have a good place to exercise*

The young adult focus group also answered a question about challenges of COVID-19. They talked about needing to relearn to do their job virtually, family challenges, and societal drama (e.g., people arguing over masks).

Priority 1 - Mental Health

Previous Data

In the 2018 Community Survey, 29.6% of respondents indicated that mental health issues were a 'big problem' and 45.7% indicated that they are a 'medium problem'. The highest ratings were seen in younger adults and ratings had increased from 2012-2018. A quarter to half of young adults indicated they or a family member had been diagnosed with mental illness (25.9% of those 18-34 and 30.4% of those aged 35-49). Depression symptoms were indicated by approximately one-third of young adults (31.8% of those aged 18-34 and 36.5% of those aged 35-49).

Reports from County Health Rankings (www.countyhealthrankings.org) provide similar information. Estimates for 2020 (data obtained in 2017) state that residents had an average of 4.4 'poor mental health days.' The data in the 2018 Community Survey was reported somewhat differently but could be interpreted to have similar results, with 16.2% of respondents reporting at least one day in which 'mental health prevents daily activities.'

Current Situation

Media reports during 2020 discuss the number of suicides increasing due to direct effects of COVID-19 and indirect effects of mitigation strategies (e.g., shutdowns, isolation). The following shows the number of suicides in Logan County for 2017-2020:

Chart 1-1: Number of Suicides Reported

Source: Logan County Health District

According to the Logan County Health District, in 2018, there were 11 suicides reported. In 2019, there were 7 suicides reported. As of October, in 2020, there have only been 5 suicides reported. This is good news. With COVID-

19, the number is much lower than anticipated. There could be a number of reasons. First, the number of people with depression symptoms could have gone down. Secondly, it could be that the resources available are working. People are struggling with depression and thoughts of suicide, but they are able to get help.

Treatment for Suicide. Are people 'getting help'? Numbers of people visiting Mary Rutan Hospital for suicidal issues are is as follows:

Table 1-1: Mary Rutan Hospital Treatment for Suicide

	2016	2017	2018	2019
Total Number Treated	**135**	**193**	**177**	**246**
Treatment by Gender				
Male	*82*	*89*	*83*	*126*
Female	*53*	*104*	*94*	*120*
Treatment by Age Group				
0-17	19	40	*42*	*58*
18-34	58	89	*81*	*99*
35-49	28	33	*33*	*47*
50-64	23	19	*13*	*34*
65+	7	12	*8*	*8*
Treatment by Department				
Emergency Department	*129*	*178*	*170*	243
IP/OBS	6	*15*	*7*	3

Source: Mary Rutan Hospital

The total number of people treated for suicidal issues increased from 2016-2017 and then again from 2018 to 2019. The numbers were relatively similar for males and females. However, when the data is disaggregated by age group, an interesting pattern emerges. The number of young people (0-17) more than doubled from 2016-2017 and stayed high. In 2019, there was also an increase in adults getting treatment (both the 35-49 and 50-64 age group).

In order to further investigate the status of mental health issues in Logan County, data was obtained on other mental health related services.

Table 1-2: Mental Health Related Services

	2017	2018	2019	2020 Jan-Sep
Self-Harm Related ED Visits	178	170	243	NA
Behavioral/Mental Health				
Visits	845	1738	4304	5769
Patients	316	592	1100	1230
Substance Use Disorder				
Visits	557	577	1223	1179
Patients	141	154	197	178
Suicidal Thoughts *Patients who answered positively to question of being 'better off dead or hurting yourself in some way*			1839	3152
Crisis Calls				202 *(40 suicidal)*

Source: Mary Rutan Hospital, Logan County Health Department, and TCN Behavioral Health

If the data is broken down by month, the majority of calls were in January and February of 2020 (76 of 202 and 27 suicidal), *before* the COVID-19 lockdowns. This would lead one to believe that season of year was more of a driving force behind the numbers and not COVID-19 or the lockdowns. The increase in behavioral/mental health visits and the increase in suicidal thoughts in patients is also an indication the reason suicides have gone down is not because people are experiencing less depression, but that they are utilizing the available help.

Data from Community Health and Wellness Partners also provides a more in-depth analysis of mental health issues from 2016-2019. There is an increase in visits, but the question is whether the increase reflects an actual increase in mental health issues or just an increase in capacity to provide treatment. In short, the reason is a mixture. There has been an increase in mental health issues, but capacity to provide treatment has also increased, matching the data provided by Mary Rutan Hospital and Logan County Health District above. Per Community Health and Wellness Partners:

> *In short, I do believe it's a little of both the fact we have increased staffing and that the need has increased greatly over the last 2 years. The stigma is slowly fading and with the rise in suicides at our local schools, parents and children are seeking help earlier. In a perfect world, to meet the need without a waitlist, we would need at least 2-3 more therapists just in the CHWP clinic, that isn't counting whatever other local agencies needs are. Patients' symptoms are more and more severe compared to previously when we saw mainly mild depression/anxiety, which complicates it even more as those with severe mental illness take up more time and often need a higher level of care than what CHWP provides. Usually, we try to refer those patients to a community mental health agency provider but, in our experience, they are struggling to have capacity to meet the need of this demographic as well.*

One of the issues discussed is a 'rise in suicides in our local schools'. Previous data has shown that mental health issues are a large concern among young adults and teens. What do teens say? A survey done by Harris Poll and the National 4-H Council polling youth nationwide found the following:

- 7 in 10 teens report experiencing mental health struggles
- 64% believe that COVID-19 will have a lasting impact on their generation's mental health
- Many report specific issues – 55% report anxiety, 43% depression, 45% excessive stress, and 61% report COVID-19 has increased loneliness

School Suicide Data. Does Logan County data reflect this national trend? What does the data say about suicides in local schools? Mental health screenings have been done in Logan County schools and show the following:

Table 1-3: Suicide Screening Data – Local Schools

	2018		**2019**		**2020**
	Spring	**Fall**	**Spring**	**Fall**	**Spring**
Number Screened	490	364	644	525	283
Positive Screenings	104 (21.2%)	74 (20.3%)	116 (18.0%)	110 (21.0%)	47 (16.6%)
Suicidal Ideation	21 (4.3%)	8 (2.2%)	26 (4.0%)	33 (6.3%)	14 (4.9%)
Suicide Attempt	2 (.4%)	12 (3.3%)	15 (.2%)	16 (3.0%)	7 (2.5%)

Source: Logan County Public School Districts

What may be concerning is not the overall numbers, but an increase in symptoms with younger children. In Fall 2019, Bellefontaine MS had a number of cases (38 positive screenings out of 177 screened, 15 with suicidal ideation and 7 attempts). In Spring 2020, there were a number of mental health issues reported in Indian Lake MS. There were 19 reported positive screenings, 8 with suicidal ideation, and 4 attempts.

The numbers from Fall 2018 do seem strange. The number of students with suicidal ideation is lower than the number of suicide attempts. This is partly due to a relatively large number of attempts at Indian Lake HS (N =6).

2020 Condensed Survey Data. An online 'condensed survey' was given to a variety of constituents in fall of 2020. One of the questions asked people to rank severity of different needs. Mental health was ranked a 1 or 2 (high need) by 43.5% of respondents and a 6 or 7 (low need) by 17.0% of respondents. In

addition, 101 of 158 respondents (64%) listed 'challenge with mental health and addiction' as a large challenge. Residents seem to see it as something needing addressed.

2020 Full Survey Data. A number of questions on the full survey related to mental health. The following questions were asked:

- In the past year, have you had 14 or more depression days?
- In the past 30 days, how many days has your mental health prevented you from performing daily activities?
- During the past 30 days, have you had serious thoughts of suicide? Have you attempted suicide?
- Have you experienced and traumatic events? Was it reported? Did you seek treatment?
- Have you or anyone in your family been diagnosed with a mental illness? Was it treated?
- Are you aware of, and have you used, the 24-hour crisis hotline?

Table 1-4: Survey – In the past year, have you had 14 or more depression days?

		'Yes' Responses	
	Total N	**Number**	**Percent**
Total	332	94	28.3
2018 Survey Responses			*27.4*
Gender			
Male	*70*	*14*	*20*
Female	*255*	*77*	*30.2*
Other	*3*	*1*	*33.3*
Total N=328			
Age Group			
18-34	*57*	*17*	*29.8*
35-49	*91*	*33*	*36.3*
50-64	*96*	*34*	*35.4*
65+	*84*	*10*	*11.9*
Total N=328			

Note: Comparisons between 2018 and 2020 surveys should be done with caution due to differences in sampling techniques and, thus, respondent demographics.

A total of 94 respondents (28.3%) stated that they had 14 or more depression days within the past year. Contrary to expectations, this number was higher in middle-aged adults than in young adults. It was the lowest among older adults. Similar to expectations, the percentage of females reporting depression was higher than that of males. Although a different sampling technique was used, this is very similar to the percentage from the 2018 survey.

Table 1-5: Survey – In the past 30 days, how many days has your mental health prevented you from performing daily activities?

	None		1-2 Days		3-10 Days		More than 10	
	N	%	N	%	N	%	N	%
Total (N=336)	235	70.6	49	14.7	29	8.7	20	6.0
2018 Survey Responses		*83.8*		*10.2*		*4.0*		*2.1*
Gender								
Male	*55*	*77.5*	*9*	*12.7*	*2*	*2.8*	*5*	*7.0*
Female	*178*	*69.8*	*38*	*14.9*	*25*	*9.8*	*14*	*5.5*
Other	*1*	*33.3*	*2*	*66.7*	*0*	*0.0*	*0*	*0.0*
Total N=329								
Age Group								
18-34	*37*	*64.9*	*10*	*17.5*	*7*	*12.3*	*3*	*5.3*
35-49	*60*	*65.9*	*17*	*18.7*	*9*	*9.9*	*5*	*5.5*
50-64	*63*	*64.9*	*16*	*16.5*	*11*	*11.3*	*7*	*7.2*
65+	*72*	*84.7*	*6*	*7.1*	*2*	*2.4*	*5*	*5.9*
Total N=330								

Note: Comparisons between 2018 and 2020 surveys should be done with caution due to differences in sampling techniques and, thus, respondent demographics.

Almost 30% of respondents reported that, in at least one day in the past month, their mental health has prevented them from performing daily activities. This percentage was lower among older adults (65+). It is higher than in 2018, where only 16.2% of respondents indicated a number of days. In addition, the percentage of people indicating 10 or more days is more than triple what it was in 2018. This could be due, in part, to fewer seniors completing the current survey. In the current survey, only 15.3% of those 65+ reported a number of days.

Table 1-6: Survey – During the past 30 days, have you had serious thoughts of suicide? Have you attempted suicide?

	Thoughts of Suicide			Attempted Suicide		
		'Yes' Responses			'Yes' Responses	
	Total N	N	Percent	Total N	N	Percent
All Respondents	336	15	4.5	333	33	9.9
2018 Survey Responses			2.2			*1.8*
Gender						
Male	*71*	*3*	*4.2*	*71*	*5*	*7.0*
Female	*257*	*12*	*4.7*	*254*	*27*	*10.6*
Other	*3*	*0*	*0.0*	*3*	*0*	*0.0*
Age Group						
18-34	*57*	*2*	*3.5*	*56*	*7*	*12.5*
35-49	*92*	*2*	*2.2*	*92*	*7*	*7.6*
50-64	*97*	*8*	*8.2*	*97*	*13*	*13.4*
65+	*86*	*3*	*3.5*	*84*	*6*	*7.1*

Note: Comparisons between 2018 and 2020 surveys should be done with caution due to differences in sampling techniques and, thus, respondent demographics.

According to respondents, 4.5% had serious thoughts of suicide within the past 30 days and almost 10% had attempted suicide at least once in their life. This was higher in females than in males, which follows statistics. Females tend to be more likely to attempt suicide, but males tend to choose deadlier means and are more likely to be successful. In terms of age group, the youngest age group (18-34) and the group aged 50-64 had the highest percentages of respondents indicating that they had attempted suicide.

Again, the numbers have increased since 2018. More than twice the percentage of respondents indicated they had considered suicide than in 2018. Like other differences in mental health issues, this could be due to differences in age distributions in the two surveys.

Table 1-7: Survey – Have you experienced any traumatic events? Was it reported? Did you seek treatment?

Question	'Yes' Responses	
	N	**Percent**
Have you experienced any traumatic events?		
None	*148*	
Physical Abuse	*74*	
Sexual Abuse	*64*	
Emotional Abuse	*111*	
Intimate Partner Violence	*35*	
Substance Use in Household	*48*	
Parental Separation or Divorce	*77*	
Incarcerated Household Member	*20*	
Mental Illness in Household	*62*	
Was the situation reported? (N=141)	43	30.5
Did you seek treatment? (N=149)	64	43.0

Some respondents reported experiencing a traumatic event. The most common event reported was emotional abuse followed by physical abuse. Of those who indicated, the majority did not report the event and slightly over half did not seek treatment. The only similar question on the 2018 survey was whether the person had experienced 'sexual assault' which is not a comparable question.

Respondents were also asked if they, or anyone in their family, had been diagnosed with a mental illness.

Table 1-8: Survey – Have you or anyone in your family been diagnosed with a mental illness? Who was diagnosed and/or treated?

	Total N	'Yes' Responses	
		N	Percent
Fall 2020 Survey Responses	321	120	37.4
2018 Survey Responses			*19.7*
Gender			
Male	*67*	*16*	*23.9*
Female	*247*	*100*	*40.5*
Other	*2*	*1*	*50.0*
Total N=316			
Age Group			
18-34	*57*	*26*	*45.6*
35-49	*92*	*46*	*50.0*
50-64	*88*	*34*	*38.6*
65+	*80*	*13*	*16.3*
Total N=317			
Who was diagnosed and/or treated? *Responses were a mix of 'self' and family member. More of the people reported diagnoses under the age of 60 than over. There was a mix of people being treated, diagnosed locally, and treated locally.*			
Why was treatment not sought? *The most frequently reported reason for not seeking treatment is stigma, followed by not seeing the issue as serious enough.*			

Note: Comparisons between 2018 and 2020 surveys should be done with caution due to differences in sampling techniques and, thus, respondent demographics.

Just over a third (37.4%) of respondents indicated that they or their family member had been diagnosed with a mental illness. There was a mixture of responses on treatment. This was quite a bit higher than in 2018. It is possibly a reflection of COVID-19 or possibly a reflection of survey sampling. The fact that diagnosis with a mental illness was reported by a greater percentage of younger respondents would point to differences being, at least in part, due to differences in sampling.

Lastly, people are aware of resources. A majority of respondents (74.4%) stated that they were aware of the 24-hour crisis hotline. Of those, 6.6% had used the service. The most common reason for using the service was that they felt that they were going to hurt themselves, followed by a traumatic situation.

Priority 2 – Substance Abuse

Previous Data

The opioid epidemic has been a recent struggle in the state of Ohio, and Logan County is no exception. In the 2018 Community Survey, 85.7% of respondents indicated that drug abuse is a 'big problem' and the percentage had increased from 2012. The perception is consistent across age group, gender, and area, with over 80% of people of all ages, both males and females, and in all areas of Logan County perceiving drug abuse as a 'big problem.'

Is the perception supported? Other results from the 2018 Community Survey would seem to show that it is, at least for certain groups. Of those age 35-49, 5.2% stated that they had been diagnosed with drug/alcohol addiction. In terms of alcohol, 15% stated that they had been drinking more than 10 days in the past month, and over 6% admitted that they had driven drunk within the past month (slightly higher for younger adults).

One issue could be that a survey will not adequately catch the amount of drug addiction present. Those with severe drug addictions are, frankly, not likely to fill out a lengthy survey. A better indication of the extent of drug abuse is the answer to the question of whether the person knows a user. In the 2018 Community Survey, 15.2% of respondents indicated that they knew a heroin user. This was highest among those ages 35-49 (24.6%) and 18-34 (22.4%).

Reports from County Health Rankings (www.countyhealthrankings.org) provide similar information. Estimates for 2020 (based on data from 2017) report excessive drinking at 19% and adult smoking at 19%.

Current Situation

Historically, one of the biggest issues regarding substance abuse in Logan County has been the use of opioids. The current situation seems slightly worse, but not considerably so. Investigating information on administration and distribution of Naloxone, numbers received from a medication take back program, information on number of prescriptions written, and other opiate related information would indicate that the situation has not changed much. Naloxone administrations were up in 2020 compared to 2018 and 2019 and the medication take back event showed an increase. However, prescriptions for opioids were consistent and other opiate data showed consistent numbers in 2019 and 2020, with a possible decrease in Narcan use but a possible increase in medical assisted treatment (MAT) depending on the final numbers for 2020.

Naloxone Administration. The following shows the distribution of Naloxone from 2018-2020:

Chart 2-1: Naloxone Administrations

Source: EMS Providers

A report provided by EMS providers (www.ems.ohio.gov) shows a total of 81 administrations of Naloxone in 2018. The administrations were pretty evenly spread throughout the year, with roughly 20 in each quarter. For 2019, there were a total of 73 administrations (slightly lower). The drop was mainly seen in the third quarter, with only 11 administrations. Reported administrations are up in 2020, with 74 in the first three quarters of the year.

Medication Take Back. For years, Logan County has had a program where people could return unused medications. The amount of medications retrieved in the 'medication take back' has steadily increased over the years. In 2017, 87.2 pounds of pills were received, in 2018, 94.0 pounds, and in 2019, 123.2 pounds. The reasoning behind this increase is unclear. It could be due to an increase of prescribed medication, increased non-prescribed medication (indication of increased opiate use), increased awareness of the event, or availability of 24/7 boxes.

Prescriptions. Data was retrieved on the number of prescriptions written for opiates and other drug categories.

Table 2-1: Prescriptions Written (Doses per Capita)

	2017	2018	2019	2020
Opioids (doses per capita)				
Quarter 1	14.6	13.3	12.0	10.6
Quarter 2	15.3	13.0	12.2	12.4
Quarter 3	15.18	12.8	12.0	
Quarter 4	14.42	12.7	11.9	
Total	**61.6**	**52.1**	**47.6**	
Benzodiazepines (doses per capita)				
Quarter 1	4.1	3.6	3.2	3.1
Quarter 2	4.2	3.4	3.3	3.5
Quarter 3	4.1	3.4	3.3	
Quarter 4	3.9	3.3	3.3	
Total	**17.0**	**13.8**	**13.1**	
Sedatives (doses per capita)				
Quarter 1	1.1	1.1	1.0	1.0
Quarter 2	1.1	1.0	1.0	1.1
Quarter 3	1.2	1.1	1.0	
Quarter 4	1.17	1.1	1.0	
Total	**4.8**	**4.3**	**4.1**	
Stimulants (doses per capita)				
Quarter 1	1.9	2.3	2.3	2.4
Quarter 2	2.3	2.3	2.4	2.6
Quarter 3	2.33	2.3	2.3	
Quarter 4	2.35	2.4	2.4	
Total	**9.6**	**9.3**	**9.4**	

Source: Ohio Board of Pharmacy Automated Rx Reporting System

Prescriptions for opioids and benzodiazepines showed a decrease from 2017 to 2019 and seem to be consistent with the lower 2019 numbers so far in 2020. Prescriptions for sedatives and stimulants were relatively consistent across all four years.

Other Opiate Data. The following describes other data related to opiate use in the county:

Table 2-2: Other Opiate Data

	2017	2018	2019	2020 Jan-Mar
Medical Providers Using MAT	9	12	15	15
Overdose Deaths	17	7	10	4
EMS Narcan Use	144	86	98	16

Source: Logan County Health Department, Logan County EMS
Narcan Kits given out to individuals Jan-June 2020 is 258 (per Kelli Parr)

The number of medical providers using medications for addiction treatment (MAT) has increased substantially in 2020. In just the first quarter of the year, numbers were as high as in the entire year of 2019. Narcan use, however, seems to be going down in 2020. If the rate for the first quarter stays consistent, the total will be 64 – substantially under that for any of the three previous years. It is possible that this could be due to the kits being distributed to individuals or to the general public. People were not as likely to call for an ambulance or go to the emergency department. Overdose deaths have seemed to remain consistent considering 2020 is just for the first quarter.

Drug-Related Deaths. The following shows information on drug-related deaths in Logan County:

Chart 2-2: Total Drug-Related Deaths

Source: Logan County Health Department

As of the first three-quarters of the year, drug-related deaths seem to be going down in 2020. In this case, a death was counted as 'drug related' if it was due directly to drug overdose or chronic drug use was listed as a contributing factor (e.g., chronic alcohol use leading to liver failure or chronic smoking leading to death by lung disease).

These numbers reflect trends in the state as a whole. According to the Ohio Department of Health, 'while the 2018 unintentional drug overdose death rate was the lowest since 2015, from 2018 to 2019 the overdose death rate increased by 6.4% to a rate …. similar to the 2016 rate.' Also, fentanyl was listed as involved in a majority of overdose cases.

Treatment for Drug Overdose. Another method of investigating drug issues in Logan County is to track the number treated at the local hospital for drug overdose. The following is data obtained from Mary Rutan Hospital:

Table 2-3: Treatment for Drug Overdose

	2016	2017	2018	2019
Total Number Treated	**349**	**483**	**434**	**579**
Treatment by Gender				
Male	*129*	*203*	*192*	*259*
Female	*220*	*280*	*242*	*320*
Treatment by Age Group				
0-17	26	34	*44*	*39*
18-34	62	83	*79*	*96*
35-49	42	85	*53*	*94*
50-64	62	90	*79*	*117*
65+	157	191	*179*	*233*
Treatment by Department				
Emergency Department	*164*	*168*	*185*	*254*
IP/OBS	*185*	*315*	*249*	*325*

Source: Mary Rutan Hospital

Treatment for drug overdose increased significantly from 2018-2019. The increase was seen for both males and females and for all age groups besides the youngest (0-17).

Alcohol Abuse. Another indicator of drug addiction is the amount of treatment for alcohol abuse. Data from Mary Rutan Hospital was obtained on the number of people treated for alcohol abuse both in the emergency department and as inpatients.

Table 2-4: Treatment for Alcohol Abuse

	2016	2017	2018	2019
Total Number Treated	**240**	**254**	**286**	**329**
Treatment by Gender				
Male	*162*	*168*	*208*	*192*
Female	*78*	*86*	*78*	*137*
Treatment by Age Group				
0-17	*0*	*1*	*7*	*2*
18-34	*42*	*49*	*45*	*68*
35-49	*77*	*95*	*65*	*116*
50-64	*85*	*74*	*111*	*103*
65+	*36*	*35*	*58*	*40*
Treatment by Department				
Emergency Department	*139*	*154*	*182*	*231*
IP/OBS	*101*	*100*	*104*	*98*

Source: Mary Rutan Hospital

Treatment for alcohol abuse has increased steadily from 2016-2019 with a marked increase in 2019 in females and in young adults.

CPS Cases. Substance abuse has an effect on families. The following shows CPS cases involving substance abuse:

Table 2-5: CPS Substance-Abuse Related Cases

	2017	2018	2019	2020 (Jan-Jun)
Referrals screened indicating substance abuse	152	146	111	57
% of cases involving opiates	38%	20%	21%	9%
% of out-of-home placements where substance abuse was a factor in removal	52%	25%	35%	62%
Of those, % opiate/heroin related	46%	21%	0%	6%

Source: Child Protective Services, Logan County.

It seems as though the number of cases in 2019 and 2020 have decreased since previous years. In addition, fewer cases are listed as involving opiates. However, there is an increase in 2020 in the percentage of out-of-home placements where substance abuse was a factor in removal. This is one piece of evidence pointing to the need for a maltreatment of children coalition.

Vaping. One new issue related to drug use is vaping, or the use of e-cigarettes. Data provided by Community Health and Wellness Partners from encounters between October 2019 and September 2020 indicate an overall low level of reported e-cigarette use. Patients were asked whether they had used e-cigarettes within the past 90 days and the results were as follows:

Table 2-6: E-Cigarette Use - General

	N	Percent Reporting Use
Total	**8731**	**4.1**
Gender		
Males	*3381*	*3.8*
Females	*5350*	*4.3*
Age Group		
Age 13-17	*253*	*3.8*
Age 18-39	*1873*	*9.5*
Age 40-64	*3649*	*3.0*
Age 65+	*2528*	*1.6*

Source: Community Health and Wellness

Overall, 4.1% of respondents stated that they had used e-cigarettes. This percentage was more than double for young adults (age 18-39) however at 9.5%. This data matches national trends with e-cigarette use among young adults. According to data from the University of Michigan's 'Monitoring the Future (MTF) Survey', reported in the New England Journal of Medicine

(https://www.nejm.org/doi/full/10.1056/NEJMc1910739), the use of e-cigarettes has increased dramatically in young people. From 2017-2019 the percent of teens who reported use increased from 4-9% for 8th graders, 8-20% for 10th graders, and 11-25% for 12th graders.

How does Logan County compare to these national percentages? Since e-cigarette use is greater among younger people, and other data from Mary Rutan Hospital indicates mental health issues in teens, more information was gathered on vaping in the local school system. Students were given a presentation on e-cigarettes and provided responses to a survey about the presentation. The following show results from the survey:

Table 2-7: E-Cigarette Use – School System Data (2019)

	N	Percent
Do you currently vape?		
No	*286*	*89.1*
Yes	*35*	*10.9*
N – 321		
Have you experimented with vaping?		
No	*232*	*81.1*
Yes	*54*	*18.9*
N – 286		
How long have you been vaping?		
0-6 Months	*13*	*37.1*
6 Months to 1 Year	*7*	*20.0*
1-2 Years	*7*	*20.0*
2 Years or More	*8*	*22.9*
N – 35		
How much money do you spend a week?		
$1-$25	*27*	*77.1*
$26-$50	*4*	*11.4*
$51-$75	*1*	*2.9*
$76-$100	*1*	*2.9*
More than $100	*2*	*5.7*
N – 35		
Do your parents/guardians know about vaping?		
None	*17*	*5.3*
Some	*197*	*61.4*
A Lot	*107*	*33.3*
Total N – 321		
What could be done to make someone quit? (some answers)		
Nothing		
Dying/Death		
A better alternative		
Show/tell them the dangers		
Show them what could happen		
Take them all away		
A ban or making it illegal		
Help from peers		

Source: Logan County High Schools

The data shows 10.9% of teens report that they currently vape and 18.9% report experimenting. Too many teens are 'picking up the habit.' Some of the suggestions from the kids to help decrease amount of vaping are to decrease access, present the health consequences (even to death), and to provide alternatives and/or positive examples.

2020 Condensed Survey Data. An online 'condensed survey' was given to a variety of constituents in fall of 2020. One of the questions asked people to rank severity of different needs. Substance abuse was ranked a 1 or 2 (high need) by 44.7% of respondents and a 6 or 7 (low need) by 24.2% of respondents. Residents seem to see it as a large issue and it likely varies by age group.

2020 Full Survey Data. A number of questions on the full survey related to substance abuse. Questions fell into two categories – alcohol and nicotine use and illegal drug use. The following were questions regarding alcohol use:

Table 2-8: Survey – Alcohol Use Questions

	2018 Survey %	Fall 2020 Survey N	Fall 2020 Survey Percent
Do you drink alcoholic beverages? (Total N=334) N and Percentage are of 'Yes' Responses		130	38.9
During the past 30 days, how many days did you have an alcoholic beverage?			
None	*53.6*	*71*	*38.0*
1-2 Days	*18.7*	*42*	*22.5*
3-5 Days	*9.9*	*32*	*17.1*
5-10 Days	*6.6*	*18*	*9.6*
More than 10 Days	*11.2*	*24*	*12.8*
Total N=187			
On average, how much do you drink per occasion?			
1-2 Drinks	*76.1*	*104*	*74.3*
3-4 Drinks	*16.2*	*23*	*16.4*
More than 4	*7.7*	*4*	*9.3*
Total N=140			

Note: Comparisons between 2018 and 2020 surveys should be done with caution due to differences in sampling techniques and, thus, respondent demographics.

Responses for the most part were as expected. Most reported minor drinking with very little binge drinking. There was an overall increase in drinking behavior but it may be due to the fact that the 2020 survey included a greater proportion of younger respondents.

Table 2-9: Survey – Alcohol Attitude Questions

Question	Agreement/Answer of 'Yes'		
	2018 Survey %	Fall 2020 Survey	
		N	Percent
It's ok for people under 21 to drink alcohol if they don't drive. (Total N=336)	*14.2*	63	18.8
People under 21 have a difficult time buying alcohol in Logan County. (Total N=327)	51.9	172	52.6
Parents should be able to buy alcohol for their children under the age of 21. (Total N= 339)	*15.7*	62	18.3
It's ok for adults to give alcohol to people under 21. (Total N=338)	*5.4*	30	8.9

On the 2018 survey, respondents were asked to rate their agreement with 'alcohol retailers are careful when it comes to preventing the sale of alcohol to underage person in our community.' The questions are worded slightly differently. Again, responses in 2020 seem to show a more lenient attitude towards drinking, but it may be that respondents tended to be younger on average.

Respondents were also asked about their nicotine use. The following are the nicotine-related questions:

Table 2-10: Survey – Nicotine Use Questions

Question	'Yes' Responses	
	N	Percent
Do you use tobacco/nicotine products? (N=341)	91	26.7
Which of these products do you use?		
Smoking	*74*	
Smokeless Tobacco	*10*	
Vaping	*8*	

Just under 30% of respondents indicated use of nicotine products. One interesting note is there was less report of vaping than expected with only 8 respondents indicating the use of e-cigarettes. The question on the 2018 survey asked how long it had been since they had smoked, and did not explicitly state all tobacco or nicotine products, so responses are not comparable.

Other questions asked about the use of illegal drugs. The following are the responses for questions related to illegal drug use:

Table 2-11: Survey – Illegal Drug Use Questions

	'Yes' Responses	
Question	**N**	**Percent**
Do you use illegal drugs or someone else's prescription medication? (N=335)	8	2.4
In the past 6 months have you used any of the following? *The most common drug reported was marijuana, with only 15 people reporting. The only other drugs reported by more than 5 people were sleeping pills and pain medication.*		
Do you know someone who has used in the past 6 months? (N=332)	93	28.0
What was the other person using? *The most common answer given was marijuana (N=77), followed by pain medication (N=29). Most indicated that those that they knew used were over the age of 21. The one possible exception was marijuana, with 10 of the reported 77 users being under the age of 21.*		

What is interesting is the difference between self-reported use and the report of knowing someone who uses. Since frequent users are not likely to voluntarily complete surveys and admit to use, the latter is more indicative of actual use. The fact that 28% of respondents indicated knowing a user indicates that there is still work to be done.

In the 2018 survey, respondents were asked about each specific drug and not an overall question on drug use. Similar to this survey, the most commonly reported drug was marijuana and it was reported by less than 5% of respondents.

Priority 3 – Healthy Living

Previous Data

Healthy living includes many factors, two of which are keeping a healthy weight and getting regular preventative health care. In 2018, 43.6% of survey respondents indicated that adult obesity was a 'big problem.' This was confirmed with responses for height and weight. Calculations based on height and weight indicated that respondents had an average BMI of 29.2 and that 36.9% would be considered obese (BMI>30). The percentage obese was relatively consistent across age groups.

In addition, less than half of 2018 survey respondents indicated that they were in 'excellent' or 'very good' health. Residents did indicate access to routine healthcare, however. Over 90% indicated that they had a personal physician or healthcare provider and almost 80% reported seeing their provider within the past year.

What health conditions have traditionally been issues in Logan County? Cardiovascular issues are common. In the 2018 survey, just over half (51.7%) of respondents indicated that they had been diagnosed with high blood pressure. This was primarily seen in older adults, with 68.2% of seniors reporting the diagnosis. In the same survey, 43% of adults reported being diagnosed with high cholesterol, with 55.9% of seniors reporting the diagnosis.

Reports from County Health Rankings (www.countyhealthrankings.org), although collected in a different format, provide similar information. Data for 2020 ratings showed the following:

Table 3-1: Healthy Living Related County Health Ranking Data

	Data	Year Collected
Poor or Fair Health	17%	2017
Poor Physical Health Days	4.0	2017
Adult Obesity	41%	2016
Physical Inactivity	27%	2016
Primary Care Physicians	2,270:1	2017
Dentists	2,390:1	2018
Mammography Screenings	40%	2017
Flu Vaccinations	47%	2017

Source: www.countyhealthrankings.org

Current Situation

BMI Data. One aspect of healthy living is keeping a healthy weight. Logan County, like the rest of the country, has traditionally had an issue with obesity. Information on height and weight from well visits can help gauge the current status.

Mary Rutan Hospital records data for patients seen over the span of multiple years. The following shows the average BMI of this group:

Table 3-2: Mary Rutan Hospital Mean BMI Data

	2017		2018		2019	
	Mean	**N**	**Mean**	**N**	**Mean**	**N**
BMI	**31.1**	**2887**	**31.2**	**2927**	**31.1**	**2986**
BMI by Gender						
Male	*31.4*	*815*	*31.4*	*828*	*31.2*	*846*
Female	*30.9*	*2072*	*31.1*	*2099*	*31.1*	*2140*
BMI by Age Group						
18-34	*30.4*	*663*	*30.8*	*665*	*30.6*	*689*
35-49	*32.5*	*597*	*32.4*	*577*	*32.6*	*565*
50-64	*31.5*	*794*	*31.8*	*797*	*31.8*	*789*
65+	*30.1*	*833*	*30.0*	*888*	*30.0*	*943*

Source: Mary Rutan Hospital. BMI numbers greater than 100 or less than 10 were treated as outliers and removed from analysis. In addition, patients younger than 18 years of age were not included as BMI is not as commonly used for children and adolescents.

Average BMI stayed consistent from 2016-2019. Unfortunately, the numbers were higher than what is recommended, with all of the average being slightly above 30 – the range for obese. The numbers were high for all age groups and for both males and females.

The reason for the high averages could be one of two factors – a handful of people with extremely high BMI data skewing the average or a significant portion of people with BMI's in the obese range. The following shows the percentage of people classified as obese (BMI>30) overall, and by gender and age group:

Table 3-3: Mary Rutan Hospital Obesity Data

	2016		2017		2018		2019	
	Percent Obese	**N**	**Percent Obese**	**N**	**Percent Obese**	**N**	**Percent Obese**	**N**
Total	**48.6**	**2841**	**48.7**	**2887**	**49.4**	**2927**	**48.8**	**2986**
Gender								
Male	*52.8*	*812*	*52.8*	*815*	*52.2*	*828*	*50.2*	*846*
Female	*46.9*	*2029*	*47.2*	*2072*	*48.4*	*2099*	*48.2*	*2140*
Age Group								
18-34	*42.7*	*649*	*45.2*	*663*	*45.7*	*665*	*45.7*	*689*
35-49	*53.4*	*609*	*54.3*	*597*	*53.9*	*577*	*53.3*	*565*
50-64	*53.6*	*797*	*52.3*	*794*	*54.1*	*797*	*53.5*	*789*
65+	*44.7*	*786*	*44.2*	*833*	*45.2*	*888*	*44.4*	*943*

Source: Mary Rutan Hospital. BMI numbers greater than 100 or less than 10 were treated as outliers and removed from analysis. In addition, patients younger than 18 years of age were not included as BMI is not as commonly used for children and adolescents.

There were a large percentage of people classified as obese. The percentages were high for both males and females and for all age groups.

It could be that people visiting hospital clinics might be more likely to have health issues, including obesity, than those that don't and that the data is influenced by the fact that those not receiving care, or receiving care other places, are not included. In order to access this, data on height and weight were obtained from Community Health and Wellness Partners for both 2018 and 2019.

Table 3-4: Community Health and Wellness BMI Data

	2018			2019		
	Mean BMI	**Percent Obese**	**N**	**Mean BMI**	**Percent Obese**	**N**
All Persons	**31.0**	**48.4**	**7459**	**31.1**	**49.2**	**7351**
Numbers by Age Group						
18-34	*29.5*	*39.7*	*1412*	*30.0*	*41.8*	*1334*
35-49	*32.2*	*52.2*	*1522*	*32.4*	*54.0*	*1495*
50-64	*32.0*	*55.4*	*2145*	*31.9*	*55.2*	*2132*
65+	*30.2*	*44.7*	*2380*	*30.2*	*45.1*	*2390*

Source: Community Health and Wellness Partners

The data look almost identical to the numbers provided from Mary Rutan Hospital. It could be for the same reasons – people are more likely to seek medical care when they have an ongoing illness and those who are obese tend to be more likely to have an ongoing illness.

Treatment Data. In addition to maintaining a healthy weight, part of healthy living is getting treatment. Hospital treatment data is available for asthma, cancer, diabetes, heart attack, hypertension, and stroke.

Table 3-5: Treatment for Asthma

	2016	2017	2018	2019
Total Number Treated	**401**	**250**	**292**	**379**
Treatment by Gender				
Male	*133*	*85*	*113*	*134*
Female	*268*	*165*	*179*	*245*
Treatment by Age Group				
0-17	*56*	*46*	*79*	*94*
18-34	*67*	*49*	*77*	*84*
35-49	*96*	*66*	*55*	*97*
50-64	*84*	*37*	*33*	*53*
65+	*98*	*52*	*48*	*49*
Treatment by Department				
Emergency Department	*176*	*135*	*194*	*257*
IP/OBS	*225*	*115*	*98*	*122*

Source: Mary Rutan Hospital

Treatment for asthma was high in 2016, went down, and then has gone up quite a bit in 2019. The increase is across the board, but highest for females. In addition, the increase is in emergency department visits rather than in-patient. This could be due to many factors – increase in prescription costs leading to more attacks requiring emergency visits, increase in high-deductible insurance and people not having access to preventative care, or increase in stress levels.

Table 3-6: Treatment for Cancer

	2016	2017	2018	2019
Total Number Treated	**218**	**267**	**243**	**259**
Treatment by Gender				
Male	*105*	*132*	*147*	*120*
Female	*113*	*135*	*96*	*139*
Treatment by Age Group				
0-17	1	2	*1*	*0*
18-34	5	8	*4*	*4*
35-49	10	11	*18*	*20*
50-64	54	*75*	*63*	*59*
65+	148	171	*157*	*176*
Treatment by Department				
Emergency Department	*100*	*129*	*144*	*148*
IP/OBS	*118*	*138*	*99*	*111*

Source: Mary Rutan Hospital

Treatment for cancer was relatively stable from 2017-2019. However, in 2018 the number of males being treated was higher than females (different than other years). In addition, in 2018 and 2019 there was more emergency department treatment than in-patient. This could be a reflection of changes in health insurance – increase in those on Medicare/Medicaid and more difficulty being able to see their doctor, or an increase in high deductible insurance.

Table 3-7: Treatment for Diabetes

	2016	2017	2018	2019
Total Number Treated	**1018**	**1227**	**1082**	**1313**
Treatment by Gender				
Male	*446*	*578*	*491*	*637*
Female	*572*	*649*	*591*	*676*
Treatment by Age Group				
0-17	*13*	*7*	*6*	*9*
18-34	*79*	*78*	*56*	*73*
35-49	*132*	*191*	*125*	*159*
50-64	*270*	*333*	*329*	*396*
65+	*524*	*618*	*566*	*676*
Treatment by Department				
Emergency Department	*246*	*300*	*268*	*408*
IP/OBS	*772*	*927*	*814*	*905*

Source: Mary Rutan Hospital

Treatment for diabetes increased to its highest level in 2019. This is seen for both males and females and for all age groups. This could be linked to the obesity data provided earlier.

Table 3-8: Treatment for Heart Attack

	2016	2017	2018	2019
Total Number Treated	**185**	**193**	**137**	**149**
Treatment by Gender				
Male	*110*	*119*	*86*	*89*
Female	*75*	*74*	*51*	*60*
Treatment by Age Group				
0-17	*0*	*0*	*0*	*0*
18-34	*2*	*2*	*1*	*1*
35-49	*19*	*20*	*12*	*18*
50-64	*62*	*60*	*48*	*39*
65+	*102*	*111*	*76*	*91*
Treatment by Department				
Emergency Department	*140*	*139*	108	112
IP/OBS	*45*	*54*	*29*	*37*

Source: Mary Rutan Hospital

In 2018 and 2019, numbers of patients treated for heart attacks have gone down compared to the two previous years. What is interesting is that the number of those age 50-64 treated went down slightly from 2018 to 2019 – the one age group to see a decrease.

Table 3-9: Treatment for Hypertension/High Blood Pressure

	2016	2017	2018	2019
Total Number Treated	**2138**	**3848**	**2893**	**2773**
Treatment by Gender				
Male	*936*	*1635*	*1250*	*1257*
Female	*1202*	*2213*	*1643*	*1516*
Treatment by Age Group				
0-17	*2*	*3*	*4*	*1*
18-34	*73*	*182*	*99*	*54*
35-49	*246*	*600*	*369*	*333*
50-64	*522*	*1048*	*781*	*754*
65+	*1295*	*2015*	*1640*	*1631*
Treatment by Department				
Emergency Department	*515*	*2123*	*1205*	*989*
IP/OBS	*1623*	*1725*	*1688*	*1784*

Source: Mary Rutan Hospital

Similar to the data for treatment for heart attacks, the numbers of people treated is lower in 2018 and 2019 compared to the two previous years. Even more telling, the decrease was across the board – males and females and those in all age groups. One interesting note is the percentage of people using the emergency department compared to inpatient. In 2017, the numbers were higher for the emergency department. In 2018 and 2019, the numbers shifted to a greater percentage of care being inpatient.

Table 3-10: Treatment for Stroke

	2016	2017	2018	2019
Total Number Treated	**4246**	**4165**	**4620**	**5552**
Treatment by Gender				
Male	*2070*	*2144*	*2351*	*2909*
Female	*2176*	*2021*	*2269*	*2643*
Treatment by Age Group				
0-17	*4*	*16*	*13*	*18*
18-34	*70*	*57*	*116*	*172*
35-49	*220*	*216*	*264*	*334*
50-64	*822*	*784*	*867*	*934*
65+	*3130*	*3092*	*3360*	*4094*
Treatment by Department				
Emergency Department	*1402*	*1598*	*1834*	*2280*
IP/OBS	*2844*	*2567*	*2786*	*3272*

Source: Mary Rutan Hospital

There was an increase in the number of people seen for stroke from 2016-2019. The number rose significantly from 2018-2019. The increase was seen across all populations – for both males and females and for those of all age groups. Part of the increase may have been due to the aging population, but the fact that numbers increased for all age groups is a cause for concern.

Dental Clinic Data. Regular dental care has not been a large concern in Logan County. However, there are some that reported an issue with oral health. In 2018, 66.2% of respondents stated that they had seen a dentist within the past year, 77% stated that they had seen a dentist within the past 2 years. Two of the biggest reasons were cost and 'no teeth.'

In order to provide increased affordable access, CHWP and Dr. Jason Robson of Bellefontaine, hosted a community wide, public dental clinic on Wednesday, October 21, 2020. In total, 13 patients were seen for dental health and routine care. Following each patient appointment, a brief anonymous survey was completed by each patient, with results as follows:

- *Of the 13 patients, 3 presented with some form of dental insurance, 10 were self-pay and seen at no charge to the patient*
- *Approximately $2000 worth of dental care and x-rays provided*
- *6 said it had been 1 year since their last dental visit; 3 said 1-2 years; 3 said 4+ years*
- *When asked the reason if unable to obtain care, 4 cited cost/price; 3 cited lack of insurance*
- *All patients reported a 5 minute or less wait time to be seen*
- *3 reported dental problems in the previous 6 months, 10 reported no issues*
- *5 reported drinking no sweetened beverage regularly; 1 occasionally drank Gatorade, 2 said they drink 1-2 sodas/day, 4 said 3-4 sodas/day, and 1 said 6 cans of soda/day*
- *4 reported they would have been unable to obtain dental care without utilizing clinic services*
- *5 reported no tobacco use in the previous 12 months; 8 report they had used tobacco products in the previous 12 months:*
- *All 13 patients seen felt the dental clinic met their personal need; 11 stated their knowledge of dental health improved after the visit, and 10 said they hoped to follow up with a dentist for further treatment/preventative care in the future.*

COVID-19. One of the biggest health issues in 2020 is COVID-19. How do the trends in Logan County compare to the national and state trends? The following details the number of positive cases and the number of deaths related to COVID-19 from April through November 2020 (cases started being counted mid-March).

Table 3-11: COVID-19 Cases and Deaths by Month

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Positive Cases								
US	*875,873*	*724,684*	*839,071*	*1,922,605*	*1,470,222*	*1,212,702*	*1,910,331*	*4,306,295*
Ohio	*15,828*	*17,486*	*16,276*	*39,370*	*31,998*	*30,830*	*61,710*	*205,366*
Logan County	*11*	*22*	*17*	*63*	*119*	*73*	*217*	*958*
Deaths								
US	*58,804*	*41,990*	*22,903*	*25,571*	*30,180*	*23,352*	*23,576*	*37,324*
Ohio	*920*	*1180*	*708*	*626*	*649*	*666*	*497*	*1,128*
Logan County	*0*	*0*	*1*	*1*	*0*	*1*	*0*	*20*

Source: Center for Disease Control (CDC)

Obviously, the numbers are troubling. Positive cases surged in July, came down slightly in August and September, and are now at the highest point in the history of the pandemic. November showed an all-time high with more than double the cases in any previous month.

Not only has the number of cases skyrocketed, the number of deaths is also high. Logan County reported 20 COVID-19 related deaths in the month of November after only 3 previously. Of the 23 deaths, most were older adults (21 out of 23 were 70 years of age or older and the other 2 were listed as 50-59). Much of this was related to outbreaks in long term care facilities – staff and residents. Previous to November, Logan county had minimal COVID-19 transmission in long term care.

Fortunately, or unfortunately, Logan County reflects trends in Ohio and the nation as a whole in COVID-19 cases. The following shows the number of positive cases as a proportion of the population:

Chart 3-1: COVID-19 Case Rates by Month

The trend, when considering population, is almost identical. Although Logan County, being in a more rural area, has a lower rate than Ohio or the US, the trends are the same. There was an increase in July and then a marked increase in November.

2020 Condensed Survey Data. An online 'condensed survey' was given to a variety of constituents in fall of 2020. One of the questions asked people to rank severity of different needs. Obesity was ranked a 1 or 2 (high need) by 22.3% of respondents and a 6 or 7 (low need) by 44.7% of respondents. Residents do not seem to see it as a large issue.

2020 Full Survey Data. A number of questions on the full survey related to healthy living. Specifically, the following areas were addressed:

- Exercise and Activity Levels
- Access to Primary Care
- Access to Services In-County
- Preventative Care

The following shows responses related to exercise and activity levels:

Table 3-12: Survey – Exercise/Activity Levels

Question	2018 Survey %	Fall 2020 Survey N	Fall 2020 Survey %
How many times a week are you physically active?			
None	*16.0*	*60*	*17.2*
1	*17.3*	*47*	*13.5*
3	*30.5*	*92*	*26.4*
5	*17.5*	*37*	*10.6*
Daily	*18.7*	*113*	*32.4*
Total N=349			
How much time do you spend when you're physically active?			
Less than 30 Minutes	*37.9*	*91*	*28.3*
30-60 Minutes	*50.1*	*174*	*54.2*
More than 60 Minutes	*12.0*	*56*	*17.4*
Total N=321			

Note: Comparisons between 2018 and 2020 surveys should be done with caution due to differences in sampling techniques and, thus, respondent demographics.

A larger than expected percentage of respondents reported regular physical activity with 113 (32.4%) reporting activity daily. Most (just over half) reported 30-60 minutes of activity.

It is also a big increase from 2018. The percentage indicating daily activity is higher than the percentage from any age group in 2018. In addition, the percentage reporting more than 60 minutes of activity is greater than for any of the age groups in 2018. This is a positive change but may be due, at least in part, to a greater percentage of survey respondents in 2020 being younger adults.

Healthy living also includes access to medical services. In the 2020 survey, respondents were asked if they had a medical provider, reasons why they might not have a medical provider, where they go for medical care, and what keeps them from seeing a doctor. The following details responses on access to primary care:

Table 3-13: Survey – Access to Primary Care

Question	'Yes' Responses	
	N	Percent
Do you have a medical provider? (N=350)	331	94.6
If not, why don't you have a medical provider?		
Can't Afford	*4*	
Don't Trust/Believe in Doctors	*2*	
Don't Have Insurance	*6*	
Haven't Needed a Doctor	*12*	
Insurance Not Accepted	*3*	
No Place Close Enough	*1*	
Where do you go for medical care?		
Primary Care/Physician Office	*40*	
Call 911	*4*	
Emergency Room	*24*	
Community Health Center	*7*	
Urgent Care Center	*35*	
Mental Health/Addiction Services Provider	*5*	
Internet/Web	*13*	
What keeps you from seeing a doctor?		
Too Expensive	*48*	
Can't Get Time Off	*37*	
Inconvenient Hours	*50*	
No Insurance	*12*	
Insurance Not Accepted	*11*	
Can't Get Appointment	*29*	
Stigma/Judgement	*17*	
Scared of Doctors	*19*	

By far, a majority of respondents indicated that they had a primary medical provider. The most common place mentioned for medical services was a doctor's office, followed by urgent care. The most common reason for not seeing a doctor is cost. High deductible insurance could be limiting access to medical services.

The percentage of those indicating having a medical provider is slightly higher than in the 2018 survey. In 2018, 91.1% of respondents indicated a primary provider, compared to 94.6% in 2020. The reason for not having a provider in 2018 was that they did not 'need a doctor' which was not an option in 2020. Similar to 2018, the most common place for medical treatment was a physician's office, followed by an urgent care center.

The following are responses regarding medical services that were received outside of Logan County:

Table 3-14: Survey – Access to Services In-County

Question	'Yes' Responses	
	N	**Percent**
In the past year, have you seen a doctor outside of Logan County? (N=338)	181	53.6
Why did you go outside of Logan County?		
Provider of Choice in Another Area	*69*	
Services not in Logan County	*55*	
Referred by Doctor	*61*	
Where Insurance Covers	*15*	
Concerns about Local Hospital	*35*	
Concerns about Logan County Doctors	*20*	
No Appropriate Doctors Accept Medicaid/Medicare	*5*	
What services did you receive outside of Logan County? *The most frequent services received outside of Logan County were lab work and mammograms, followed by general care and X-Rays/MRIs.*		

Just over half of respondents indicated that they had received medical services outside of Logan County. The most popular reasons for going out of the county was that the provider of choice was in another area or they were referred by their doctor. The 2018 survey asked people if they received medical care outside of Logan County. A majority (59.3%) indicated that they did. Although the question was worded slightly differently, the percentages were similar.

Finally, there were a number of questions on the fully survey regarding preventative care. The following are the responses.

Table 3-15: Survey – General Medical Care

Question	2018 Survey %	Fall 2020 Survey N	Fall 2020 Survey Percent
How long has it been since you've had a routine medical checkup?			
Within the Past Year	*79.3*	*238*	*70.8*
1-2 Years	*9.4*	*47*	*14.0*
2-5 Years	*4.3*	*26*	*7.7*
5 of More Years	*5.4*	*18*	*5.4*
Never	*1.5*	*7*	*2.1*
Total N=336			

Note: Comparisons between 2018 and 2020 surveys should be done with caution due to differences in sampling techniques and, thus, respondent demographics.

The majority of respondents indicated seeing a doctor within the past year. With COVID-19 and the fact that the 2020 respondents tended to be younger, one might have expected a larger difference. Even so, many are indicating that they do have routine medical checkups.

The following are responses for dental care:

Table 3-16: Survey – Dental Care

Question	'Yes' Responses 2018 Survey %	'Yes' Responses Fall 2020 Survey N	'Yes' Responses Fall 2020 Survey Percent
Have you seen a dentist or orthodontist within the past year? (N=340)	66.2	178	52.4
If not, why has it been more than a year? *The most common reason given was cost, followed by 'no teeth' and 'don't have dentist''*			

Note: Comparisons between 2018 and 2020 surveys should be done with caution due to differences in sampling techniques and, thus, respondent demographics.

A lower percentage of respondents than one would hope indicated seeing a dentist or orthodontist within the past year, and percentages are lower for 2020 than 2018. This could be a result of COVID-19 shut-downs. As a greater percentage of younger adults report regular visits to the dentist (58.6% of those 18-34 and 60.6% of those 35-49) it is not related to age differences in the surveys.

The following are responses to questions regarding age and/or gender specific preventative care:

Table 3-17: Survey – Gender/Age Specific Preventative Care

Question	2018 Survey %	Fall 2020 Survey N	Fall 2020 Survey Percent
When did you last have a Mammogram?			
Less than a Year	*61.8*	*72*	*54.1*
1-2 Years	*12.8*	*22*	*16.5*
2-3 Years	*4.3*	*11*	*8.2*
More than 3 Years	*15.1*	*25*	*18.8*
Never	*6.0*	*3*	*2.3*
Total N=133 (Women 50 and older) Note: 2018 included women 40 and older			
When was your last PAP test?			
Less than a Year	*29.5*	*69*	*32.4*
1-2 Years	*18.0*	*50*	*23.5*
2-3 Years	*10.8*	*33*	*15.5*
More than 3 Years	*38.4*	*55*	*25.9*
Never	*3.2*	*6*	*2.8*
Total N=213 (All Women)			
When was your last PSA?			
Only 13 men between the ages of 50-64 responded. The answers were split between 'less than a year' and 'never' with slightly more (6/13) stating that they had recently had a PSA test.			
When was your last colonoscopy?			
Less than a Year	*13.8*	*27*	*23.1*
1-2 Years	*14.1*	*27*	*23.1*
2-3 Years	*10.4*	*17*	*14.5*
More than 3 Years	*31.0*	*35*	*29.9*
Never	*20.7*	*15*	*12.8*
Total N=117 (Women 50 years and older)			

Note: Comparisons between 2018 and 2020 surveys should be done with caution due to differences in sampling techniques and, thus, respondent demographics.

In general, Logan County residents are reporting access to routine medical care. The majority of women are reporting mammograms and PAP tests. It is encouraging that the percentage receiving gender or age-specific preventative care is higher, for the most part, than in 2018 despite COVID-19.

Priority 4 – Safe and Healthy Families

Previous Data

Keeping families safe and healthy includes making sure families are safe from danger (domestic violence, child abuse, unsanitary/unhealthy conditions), and making sure families are healthy by providing access to health insurance and immunizations. It also includes providing needed assistance (e.g., food stamps, Medicaid).

The 2018 survey collected a number of pieces of information on safety. Overall, 26.4% of respondents stated that domestic violence is a 'big problem' and 28.2% stated that child abuse was a 'big problem.' This was similar across age groups, but women tended to report both issues as problems more than men. Some reported safety concerns. Of respondents, 16.6% stated that they had been a victim of an internet crime and 7.0% reported being a victim of abuse within the past year with the youngest age group having the highest percentage. In addition, 17.8% stated that they had been the victim of a sexual assault (22.5% of women), a number that was even higher in 2015.

In terms of health resources, according to the 2018 survey, most residents had access to health insurance. Only 2.7% reported being uninsured, which was a decrease from 2012 and 2015. There were a couple areas of the county with higher percentages of uninsured, however – Russells Point and Central Bellefontaine. In addition, a significant finding from a 2018 report from the Logan County Health Department is that children under 18 are a group that is likely to be uninsured. This matches with data on use of assistance from a Logan County agency. Of respondents, 9.8 reported use of government assistance, with the largest number being young adults (those with small children).

When investigating measures of economic and family need, measures are more positive. Only a small number see juvenile delinquency, teenage pregnancy, or unemployment as a big problem.

Reports from County Health Rankings (www.countyhealthrankings.org), although collected in a different format, provide similar information. Data for 2020 ratings showed the following:

Table 4-1: Safe and Healthy Families Related County Health Ranking Data

	Data	Year Collected
Low Birthweight	7%	2012-18
Uninsured	7%	2017
Food Environment Index	8.1	2015/17
Teen Births	32	2012-18
Children in Single-Parent Households	29%	2014-18
Violent Crime	104	2014-16
Injury Deaths	97	2014-18
Air Pollution	11.7	2014

Source: www.countyhealthrankings.org

Current Situation

Safety. One typical measure of safety is the crime rate. The National Incident Based Reporting System (NIBRS) is now the standard for police departments in terms of reporting of violent crimes and property crimes. The following is data from Logan County precincts for 2016 to 2019:

Table 4-2: Violent Crime Incidents

	2016	2017	2018	2019
Total Number	**35**	**36**	**31**	**50**
Logan County Sheriff's Office	13	19	17	26
Bellefontaine Police	19	12	11	22
Russells Point Police	0	4	3	2
De Graff Police	0	0	0	0
West Liberty Police	3	1	0	0
Washington Township Police	0	0	0	0

Source: NIBRS (National Incident-Based Reporting System) Database

The numbers rose to their highest point in 2019. The increase was across both of the two most heavily populated precincts (Logan County Sheriff and Bellefontaine Police).

The NIBRS system also collects information on property crimes. The following are the reported property crimes from Logan County precincts:

Table 4-3: Property Crime Incidents

	2016	2017	2018	2019
Total Number	**824**	**630**	**498**	**389**
Logan County Sheriff's Office	372	268	179	164
Bellefontaine Police	405	335	283	202
Russells Point Police	26	22	27	23
De Graff Police	0	0	0	0
West Liberty Police	21	5	9	0
Washington Township Police	0	0	0	0

Source: NIBRS (National Incident-Based Reporting System) Database

The numbers seem like they are moving in a positive direction. The overall numbers and numbers in the most heavily populated areas all have shown a steady decrease from 2016-2019.

Only some police incidents are reported on NIBRS. The Bellefontaine Police collected their own data on number of incidents. The following are the number of all incidents (both reported to NIBRS and other) for 2018 to 2020:

Table 4-4: Bellefontaine Police Incident Numbers

	2018	2019	2020 Jan-Jun
Total Number of Offenses	**1327**	**1128**	**389**
Type of Offense			
All Other Offenses	*212*	*144*	*35*
All Other Offenses (Victim)	*14*	*20*	*11*
Arson	*0*	*0*	*1*
Assault – Intimidation	*62*	*64*	*26*
Assault- Aggravated	*19*	*21*	*3*
Assault – Simple	*101*	*122*	*48*
Bad Checks	*1*	*4*	*0*
Burglary/Breaking and Entering	*30*	*35*	*9*
Counterfeiting/Forgery	*3*	*8*	*3*
Credit Card/ATM Fraud	*2*	*6*	*2*
Destruction/Damage/Vandalism of Property	*64*	*60*	*29*
Disorderly Conduct	*90*	*86*	*23*
Driving Under the Influence (DUI)	*94*	*74*	*16*
Drug Equipment Violations	*28*	*18*	*8*
Drug/Narcotic Violations	*140*	*84*	*20*
Extortion/Blackmail	*1*	*0*	*0*
False Pretense/Swindle/Confidence Game	*2*	*5*	*2*
Family Offenses, Nonviolent	*1*	*0*	*0*
Forcible Fondling	*2*	*6*	*1*
Impersonation	*15*	*16*	*4*
Kidnapping/Abduction	*2*	*4*	*0*
Liquor Law Violation	*45*	*23*	*3*
Murder and Nonnegligent Manslaughter	*1*	*0*	*0*

	2018	2019	2020 Jan-Jun
Non-IBR Offense	*44*	*54*	*33*
Peeping Tom	*1*	*0*	*0*
Pornography/Obscene Material	*13*	*3*	*1*
Rape – Forcible	*6*	*7*	*1*
Rape – Other	*0*	*3*	*1*
Robbery	*2*	*0*	*1*
Stolen Property Offenses	*1*	*5*	*0*
Theft from Motor Vehicle	*1*	*4*	*1*
Theft –Vehicle	*3*	*9*	*3*
Theft – Shoplifting	*4*	*0*	*0*
Thefts – Other	*300*	*206*	*91*
Trespassing	*14*	*29*	*12*
Weapon Law Violation	*8*	*8*	*1*
Welfare Fraud	*1*	*0*	*0*

Source: Bellefontaine Police Department

If anything, the numbers have decreased from 2018 to 2020. Although in a few cases, there were increases from 2018 to 2019 (e.g., assault), most of the numbers went down and the trend is continuing for 2020. Possibly a side effect of the shutdowns is the people were not able to be 'out and about' as much and, thus, not have as much opportunity for criminal activity. It is also interesting to note that crimes involving households and/or crimes that could possibly be done online did not see an increase (e.g., 'family offenses', pornography).

Persons Receiving Public Assistance. When talking about safe and healthy families, one of the pieces of data is the numbers of adults and children receiving government assistance

Table 4-5: Persons Receiving Public Assistance

	2018	2019		2020	
		Jan	June	Jan	June
OWF – Cash Assistance					
Adults	*17*	*15*	*12*	*14*	*40*
Children	*292*	*255*	*239*	*252*	*304*
SNAP – Food Stamps					
Adults	*NA*	*2992*	*2850*	*2809*	*3026*
Children	*NA*	*2104*	*1987*	*1856*	*1902*
Publicly Funded Child Care					
Families		*52*	*46*	*36*	*25*
Children		*84*	*76*	*62*	*44*
WIC	614	572		652	

Source: Logan County Department of Job and Family Services

The numbers in January and June of 2019 and in January of 2020 remained consistent. However, one can see changes in June of 2020, most likely related to COVID-19. There was a marked increase in cash assistance, a

slight increase in SNAP, and a decrease in the need for publicly funded childcare. The increase in cash assistance may be directly tied to the volatile unemployment rate. The decrease in the use of childcare may be partially due to the lack of need because of parents being out of work and partially due to the lack of availability due to COVID-19 regulations on the numbers of children per site.

The number receiving WIC decreased in 2019 but increased in 2020. The increase in 2020 was, in part, an increased need due to COVID-19, but also a change in process and ease of making appointments virtually due to COVID-19.

Ohio Kids Count also collects data on eligibility for services and CPS-related information. The following is information from Ohio Kids Count:

Table 4-6: Ohio Kids Count Fact Sheet

	2016	2017	2018	2019
Students Economically Disadvantaged	38.8%	37.4%	37.3%	
Children Eligible for SNAP	32.7%	31.9%	29.8%	23.9%
Child Abuse/Neglect (rate per 1000 children)	17.3	20.3	20.5	17.8
Felony adjudications (per 1000 children)	1.5	2.0	1.6	1
Children in foster care (per 1000 children)	6.1	8.1	10.6	10.9
Children enrolled in Medicaid	54.3%	52.1%	50.1%	50.6%

Source: Kids Count Data Center

The percentage of children eligible for SNAP has decreased from 2016 to 2019. However, the child abuse/neglect rate has remained consistent and the children in foster care has increased slightly.

Immunization Data. The Ohio Department of Health collects reports from schools on whether children are entering school with required immunizations. There is a concern that, because of COVID-19, many children are missing their regular vaccinations. Limits on access to non-essential medical treatment and the fact that physicians' offices have been increasingly focused on COVID-19 have likely affected access. The following is the data reported via the Logan County Health District:

Chart 4-1: Percent of Kindergarten Students Immunized

Source: Logan County Health District

In all of Logan County school districts, a vast majority of kindergarten students come in with all required immunizations.

The same is true for students in 7th grade. The following is information on the percentage of 7th grade students with all required immunizations:

Chart 4-2: Percent of 7th Grade Students Immunized

Source: Logan County Health District

The numbers look ok, but not as good as kindergarten immunizations. Bellefontaine School District has the lowest percentage of 7th grade students with all required immunizations.

In fact, the percentage of students will all required immunizations decreases even more when regarding the numbers for high school seniors. The percentage of 12th grade students with all required immunizations is as follows:

Chart 4-3: Percent of 12th Grade Students Immunized

Source: Logan County Health District

The percentages of high school seniors in Bellefontaine Schools without all required immunizations is troubling. More information is needed to understand the reason behind the lack of immunization – cost, fear, access to a primary care physician, transportation, etc. Information in the report indicated that there are a large number of providers in Bellefontaine. Instead of an issue of access, there are a large number of students whose parents sign a waiver to opt out of immunizations. It is possible that it is an issue of either cost, time, or transportation.

2020 Condensed Survey Data. Another measure of safe and healthy families is questions related to the health and safety of children. An online 'condensed survey' was given to a variety of constituents in fall of 2020. One of the questions asked people to rank severity of different needs. Maltreatment of children was ranked a 1 or 2 (high need) by 29.3% of respondents and a 6 or 7 (low need) by only 14.6% of respondents. In addition, 53.2% of respondents indicated a challenge with childcare. Childcare did seem to be an issue.

2020 Full Survey Data. A number of questions on the full survey related to safe and healthy families. The main topics were the presence of children in the home, driving safety measures, and whether they had health insurance. The following questions, specifically were asked:

- Do you have any children in your home and how are you related?
- Do you attempt any of the following while driving?
- Do you have health insurance, and, if so, what does it cover?

Table 4-7: Survey – Children and Driving Habits Questions

Question	'Yes' Responses	
	N	Percent
Do you have any children in your home? (N=331)	127	38.4
How are you related to the children?		
Parent/Foster Parent	*113*	
Grandparent	*15*	
Sibling	*1*	
Other Relative	*4*	
Not Related	*3*	
Do you attempt any of the following while driving?		
Talking on the Phone	*163*	
Texting	*55*	
Driving Tired	*49*	
Disciplining Kids	*32*	
Reading Maps/Directions	*52*	
Eating or Drinking	*196*	
None	*92*	

Just over a third of respondents stated that they had children in the home. The most common distracted driving behaviors were eating and drinking as well as talking on the phone.

In the 2018 survey, a much lower percentage of respondents indicated that they had children living at home (17.9%). This is most likely due to the sampling. In the 2020 sample, there was a much higher percentage of younger respondents. In 2018, only 19.8% of respondents were under the age of 50, while in 2020, 44.6 were under the age of 50. Similar to 2018, the most typical responses on driving behaviors was talking on the phone and eating, with 58.9% and 67.9% indicating the behaviors, respectively.

People were also asked if they had health insurance. The following are the responses:

Table 4-8: Survey – Health Insurance

Question	'Yes' Responses	
	N	Percent
Do you have health insurance? (N=335)	314	93.7
If not, why don't you have health insurance?		
Couldn't Afford Premiums	*9*	
Employer Doesn't Offer	*1*	
Ineligible	*1*	
Lost/Changed Jobs	*8*	
What does your health insurance cover? *Most reported that their insurance covers hospitalization, routine care, and prescriptions. Beyond that, a good portion knew that they had vision, dental, and mental health coverage.*		

By far, the majority of people indicated having health insurance. The most common reasons why not were not being able to afford premiums and losing or changing jobs.

The question was asked differently in 2018. Respondents were asked about the type of health care coverage they had. In that survey, 97.3% of respondents indicated a type of coverage. This is a higher percentage than the present survey, but not significantly so and the current numbers do reflect percentages from earlier data (e.g., 2012).

Priority 5 – Housing and Homelessness

Previous Data

In the 2018 Community Needs Survey, very few of the respondents listed homelessness as a 'big issue' (9.7%). However, just under a quarter of respondents (23.2%) listed affordable housing as a 'big problem' and a small percentage (11.1%) indicated safe housing as a 'big problem.'

The 2018 survey asked a number of questions about the quality of housing. In terms of household health issues, the most common issues reported were mosquitos and rodents. For young adults, 8.2% and 10.6% of respondents, respectively, listed mosquitos and rodents as issues. A portion of the young adult population also reported problems with bedbugs (8.2%). Young adults also reported houses with heating/AC problems (8.2%).

In terms of overall housing conditions, the fact that housing was 'too close to neighbors' was listed as the biggest problem, with 8.3% of respondents listing it as an issue. Again, the housing issue was most prevalent among young adults (17.6%).

Reports from County Health Rankings (www.countyhealthrankings.org) provide similar information. Data for 2020 ratings showed that, according to 2011-16 data, 11% of residents stated that they had a 'severe housing problem.'

Current Situation

State of Housing. Information from www.census.gov estimates that in 2019 there were 23,501 housing units in Logan County with a median housing value of $129,100. According to www.city-data.com, the median house value in 2017 was $124,286, so the price of housing didn't rise much from 2017-2019. The housing value in Logan County is below the state median. The cost of living index, according to www.city-data.com, reflecting, in part housing, is also relatively low in Logan County at 77.9 (US average is 100).

Another important criterion related to housing in 2020 is Internet access. According to the US Census Bureau, data from 2014-2018 suggested that 87.5% of households had a computer and 79.9% of households had a broadband Internet connection. This is similar to the nation (88.8% and 80.4% respectively) and almost identical to Ohio (87.4% and 79.7% respectively)

The percentage homeless in Ohio as reported by the United States Interagency Council on Homelessness was 1.83% in January 2019. Data is not

currently available for how Logan County compares to the state average. By all other measures, one might assume that the county would be slightly better than the state average. Because those who are homeless are typically difficult to contact, it is difficult to obtain accurate statistics on the percent of the population without a residence.

Homelessness Resources. There are a number of resources in Logan County aimed at providing help to those who are homeless. Data from one of these agencies was collected for 2019.

Table 5-1: Emergency Shelter - 2019

Total Receiving Shelter	**53**
Age	
0-12	*11*
13-17	*3*
18-34	*14*
35-61	*24*
62+	*1*
Gender	
Male	*28*
Female	*25*
Race	
White	*40*
African-American	*7*
Multiple Races	*5*
NA	*1*
Number Meeting Other Criteria	
Chronic Homeless	*8*
Veteran	*4*
Disabled	*18*
Reported Domestic Violence	*12*

Source: Logan County Homeless Shelter

The people utilizing the services of the homeless shelter tend to be younger (only 1 of 53 was an older adult) and some have a variety of issues hindering their ability to find a place to live (e.g., disability and domestic violence). What is interesting is that a number of the persons in the shelter were children (11 out of 53 or 21%).

Survey of Sheltered Homeless Persons. In January, 2020, a survey was done of 'sheltered homeless persons.' The following are the results of that survey:

Table 5-2: Survey of Homeless January 2020

Total Completing Survey	**58**
Housing Situation 1/21/20	
Shelter	*12*
Relatives/Family	*22*
Friends	*13*
Street	*1*
Jail	*1*
Hotel/Motel	*1*
Car	*4*
Own Apartment	*3*
Sober Living Home	*1*
Age	
0-18	*1*
19-30	*22*
31-50	*25*
51-65	*8*
Gender	
Male	21
Female	36
Other/Non-Conforming	1
Reasons for No Housing	
No Income	*32*
Working Part-Time	*11*
Shortage of Affordable Housing	*24*
Unemployment/Job Loss	*13*
Family Violence	*11*
Released from Prison	*1*
Eviction History	*5*
Physical Disability	*4*
Mental Disability	*30*
Alcohol/Drug Abuse	*18*
Criminal Record	*15*
Lack of Transportation	*15*

Source: Logan County Homeless Shelter

This data was slightly different than the previous. Of the respondents, the majority were adults. There was an approximately equal distribution of males and females. Some of the biggest issues as to why they did not have money for housing was a shortage of affordable housing (one of the issues listed on the 2018 survey) and mental disability.

2020 Condensed Survey Data. An online 'condensed survey' was given to a variety of constituents in fall of 2020. One of the questions asked people to rank severity of different needs. Housing and homelessness was ranked a 1 or 2 (high need) by 23.7% of respondents and a 6 or 7 (low need) by 26.7% of respondents. In addition, 41.8% of respondents indicated housing as a challenge. This was the second most listed challenge behind mental health and addiction.

2020 Full Survey Data. A few of the questions on the full survey dealt with housing and homelessness. The following are the responses to the survey questions related this priority:

Table 5-3: Survey – Questions Related to Housing and Homelessness

	'Yes' Responses	
Question	**N**	**Percent**
Have you been homeless in the past 6 months? (N=327)	16	4.9
If yes, where did you stay?		
Couch Surfing	*6*	
Shelter	*5*	
Street	*1*	
Car	*3*	
Camping	*2*	
With Family Regularly	*13*	
With Friends Regularly	*3*	

Very few respondents indicated being homeless. Those that were indicated that they relied on family. This data was not collected on the 2018 survey (it was sent to households and, therefore, did not include the homeless population).

Priority 6 – Resources and Awareness

Previous Data

The priority of resources and awareness is whether residents are aware of and make use of resources available in the county. One way to assess awareness is to investigate what residents state are 'community needs.' In the 2018 survey, access to public transportation on evenings and weekends was listed by 34% of people as a big problem. Poverty and affordable housing were other issues listed by 23.8% and 23.2% of people respectively.

In 2018 there was a relative lack of awareness of some resources. Only 32.7% of respondents indicated that they were aware of a phone hotline and only 3.8% indicating awareness of a text line. It is possible that many did not have use of the resources. Either because of lack of knowledge or lack of need, only 9.8% of those responding to the 2018 survey indicated that they had used assistance from a Logan County agency. This was highest for young adults and for those from Russells Point. The most common assistance reported was food stamps.

How do residents get information? In 2018, the most common response was television, followed by radio and telephone. Younger residents, as expected, were more likely to cite online sources – text, social media, Internet.

Current Situation

'Rural' Communities. In a report by the Appalachian Rural Health Institute dated January 2019, a number of issues were laid out in terms of resources and awareness in Ohio's rural counties (including Logan County). Information was gathered both from secondary sources and from a large-scale survey. Some of the findings showed that:

- *71.6% of those in rural counties don't believe there are enough health care services in their county.*
- *Logan County is listed as a group in a 'mental health shortage area.'*
- *Those in rural areas are less likely to use a primary care physician and more likely to use urgent care, the 'health department' and see a nurse practitioner.*
- *Those in rural counties are less satisfied with the care they receive – convenience, cost, courtesy, information, and quality.*

ALICE Households. One method to determine if people have need of services and able to access services is to assess the number of households considered ALICE (asset limited, income constrained, employed). It is basically a count of households earning 'more than the Federal poverty level but less than the cost of living for the county.' Knowing these numbers for 2018 should

give one an idea of how many households have need of and/or may have issues accessing services in 2019 and 2020. The following is data from 2018:

Table 6-1: ALICE Households Overview - 2018

	Total Households	Poverty	ALICE	Above ALICE
Total	18,654	12.9%	22.9%	64.2%
Geographic Area				
43310 – Belle Center	*1,097*	*9.9%*	*18.9%*	*71.2%*
43311 – Bellefontaine	*7,595*	*14.5%*	*20.5%*	*65.0%*
43318 – DeGraff	*1,557*	*13.5%*	*22.2%*	*64.4%*
43319 – East Liberty	*412*	*3.2%*	*20.4%*	*76.5%*
43324 – Huntsville	*1,276*	*6.1%*	*18.5%*	*75.4%*
43331 - Lakeview	*2,247*	*14.9%*	*34.7%*	*50.4%*
43333 – Lewistown	*229*	*37.6%*	*18.3%*	*44.1%*
43343 – Quincy	*458*	*17.9%*	*17.5%*	*64.6%*
43347 – Rushsylvania	*580*	*15.0%*	*15.5%*	*69.5%*
43348 – Russells Point	*879*	*26.6%*	*33.6%*	*39.8%*
43357 – West Liberty	*1,616*	*5.5%*	*27.2%*	*67.3%*
43358 – West Mansfield	*1,061*	*7.6%*	*17.4%*	*74.9%*
43360 – Zanesfield	*652*	*3.4%*	*16.1%*	*80.5%*
Family Status				
Single or Cohabitating (No Children	*8,541*	*10.6%*	*20.5%*	*68.9%*
Families with Children	*5,075*	*20.7%*	*8.8%*	*70.5%*
Senior	*5,038*	*9.1%*	*40.9%*	*50.0%*

Source: United Way of Logan County

The proportion of households in Logan County below the poverty threshold or the ALICE threshold is slightly lower than state levels. In 2018, Ohio had 13.7% in poverty and 24.1% in the ALICE range. Levels vary throughout the county, however. The areas in Logan County with the highest percentage of households in poverty or below the ALICE threshold are Russells Point and Lewistown, with more than 50% of households struggling. In addition, levels vary with type of household. Families with children are more likely to be below the poverty line, but many senior households are above the poverty line but under the ALICE threshold.

Did the number of people eligible for services increase in 2019 and 2020? The following provides the total numbers of people eligible for Medicaid along with the number of women and children:

Chart 6-1: Medicaid Eligible

Source: Logan County Department of Job and Family Services

The number of people eligible for Medicaid has remained very consistent across 2019 and 2020. One can see a slight increase with the pandemic (March-June 2020) but the trend is relatively flat.

EMS Runs. Households in need do make use of some of the services available. The following show EMS runs from 2018 to 2020:

Table 6-2: EMS Runs

	2018	2019	2020 Jan-Jun
Bellefontaine	2,099	2,485	1,164
Logan County Runs			
BMRT	*292*	*300*	*125*
Bokescreek	*61*	*72*	*39*
Huntsville	*179*	*224*	*82*
Indian Lake	*1,192*	*1,248*	*579*
Machochee	*617*	*603*	*282*
Perry	*155*	*151*	*67*
Miami Township	*19*	*36*	*22*
Riverside	*245*	*227*	*133*
Robinaugh	*298*	*222*	*53*
Rushcreek	*81*	*47*	*38*

Source: Bellefontaine EMS and Logan County EMS
Note: Zanesfield/Tri-Valley did not submit data

The change over time in number of runs varied by area. Many areas had fewer runs in 2019 than 2018 (Machochee, Perry, Riverside, Robinaugh, and Rushcreek) while others had more (BMRT, Bokescreek, Huntsville, Indian Lake,

and Miami Township). The data from 2020 seems to be similar to the two previous years, but with only Jan-June data in, it is difficult to say.

Transportation. As one of the community needs presented on the 2018 Community Needs Assessment was increased transportation, information was gathered from RTC Services, a major provider of transportation in Logan County. Data from 2018-2020 are as follows:

Chart 6-2: Transportation Provided

Source: RTC Services

The total amount of transportation provided increased from 2018 to 2020. However, there was a slight decrease in transportation for seniors and in denials, refusals, and turn downs over time.

Area partners are working toward expanding transportation services. Per Logan County Recovery Zone in August 2020:

> We are very excited to announce expanded transportation that is now available! Over the past year, Recovery Zone has been working with our Logan Co Transportation Authority (Tam Blakely), RTC Transportation and United Way to expand access to recovery services in our county. Due to limits on resources, we have only been able to pick up persons within the Bellefontaine city limits. RTC will now be providing transportation outside of town through coordinated efforts with United Way!

211 Calls. Residents are also making use of the 211 system. The following shows an overview of the distribution of 211 calls for 2018 to 2020:

Table 6-3: 211 Calls (Overview)

	2018	2019	2020 Q1-Q3
Total Number of Transactions/Calls	**1162**	**1250**	**783**
Needs Identified	2244	2528	1585
Agency/Service Referrals	3274	3304	1551
Unmet Needs	99	118	27
Gender			
Male	*305*	*313*	*272*
Female	*779*	*794*	*449*
Area			
43310 – Belle Center	*17*	*24*	*10*
43311 – Bellefontaine	*636*	*796*	*433*
43318 – DeGraff	*30*	*36*	*15*
43319 – East Liberty	*8*	*4*	*0*
43324 – Huntsville	*21*	*27*	*14*
43331 - Lakeview	*79*	*100*	*71*
43333 – Lewistown	*10*	*6*	*5*
43343 – Quincy	*7*	*19*	*4*
43347 – Rushsylvania	*16*	*24*	*6*
43348 – Russells Point	*77*	*61*	*39*
43357 – West Liberty	*29*	*27*	*22*
43358 – West Mansfield	*10*	*6*	*7*
43360 – Zanesfield	*21*	*12*	*6*
Other/Not Reported	*46*	*109*	*NA*

Source: Logan County 211 Report. 2020 data is for the first half of the year.

The total number of calls, the number of needs identified, the number of referrals, and the unmet needs all increased slightly from 2018 to 2019. However, based on the first three quarters of the year, the total number of calls, the total number of needs, the number of referrals, and the unmet needs are all projected to decrease in 2020. When reported by gender and by area, more calls are coming from women than men and the most calls are coming from the most populated areas (e.g., Bellefontaine).

In many cases, residents received a referral to an agency for help with a specific issue. The following details 211 referrals:

Table 6-4: 211 Calls – Specific Referrals

	2019		2020		
	Q3	Q4	Q1	Q2	Q3
Type of Referral					
Info Only	*41*	*75*			
Electric Assistance	*47*	*45*	*41*	*18*	*21*
Rent Assistance	*40*	*42*	*33*	*31*	*30*
Water Assistance	*24*	*30*	*15*	*9*	*21*
Gas Assistance		*20*	*11*	*8*	
Emergency Shelter	*38*	*54*	*35*	*20*	*34*
Housing Issues	*36*	*34*	*24*	*22*	*44*
Homeless	*32*	*40*	*30*	*18*	*32*
Pantries and Food	*44*	*21*	*47*	*63*	*32*
Medical/Health	*24*		*13*		*23*
Transportation	*19*	*21*	*8*		*9*
General Financial	*17*	*18*	*12*	*10*	*12*
Relationship	*13*	*14*		*27*	*37*
Mental Health and Hotline/Crisis	*12*	*14*	*12*		
Domestic Violence		*12*			
Needing to Move	*12*	*13*			*13*
Other	*18*	*23*	*27*	*29*	
Animal Issues			*8*	*10*	
Pandemic				*24*	*9*
Legal Aid					*12*
Agency Referred					
Salvation Army	*93*	*102*	*84*	*43*	*28*
Helping Hands	*112*	*120*	*74*	*53*	*55*
St. Vincent De Paul/St Mary	*116*	*95*	*66*	*21*	*25*
Logan Co DJFS	*51*	*71*	*34*	*9*	*9*
Bridges	*63*	*63*	*52*		
Give and Take Community Services	*60*	*26*	*14*	*11*	*15*
Lutheran Community Services	*13*	*21*	*7*		*13*
West Liberty Cares	*9*	*20*		*13*	
Logan Co Homeless Shelter	*28*	*15*	*18*	*7*	*12*
Caring Kitchen	*11*	*14*	*12*	*7*	*16*
Internet	*8*	*14*	*6*		
Wake up the World Ministries	*7*				
Hearts to Hands	*9*		*8*		*9*
Seventh-Day Adventist Church	*11*				
Lighthouse Emergency Shelter		*14*			*15*
RTC Public Transportation		*12*			
Area Agency on Aging		*9*			
Second Harvest Food Bank					
Help Line			*26*	*7*	
New Hope Ministries			*6*	*13*	*9*

Source: Logan County 211 Report.

Referrals are for what one would typically expect. For the 3rd quarter of 2019 electric assistance and food were at the top of the list, with a number of referrals to Helping Hands and services affiliated with St. Paul and St Mary's churches. Needs in the last quarter of 2019 were electric and rent and emergency shelter with the Salvation Army and Helping Hands topping the list of places to which people were referred. For 2020, similar issues are seen – electric

assistance and food and emergency shelter. In particular, 'pantries and food' increased in the second quarter of 2020 when the pandemic hit. Most referrals in 2020 were to the same places – Salvation Army, Helping Hands, and services provided by St Paul and St. Mary's churches.

2020 Condensed Survey Data. An online 'condensed survey' was given to a variety of constituents in fall of 2020. One of the questions asked people to rank severity of different needs. Access to resources was ranked a 1 or 2 (high need) by 18.8% of respondents and a 6 or 7 (low need) by 24.3% of respondents. Workforce development/jobs was ranked a 1 or 2 (high need) by 26.2% of respondents and a 6 or 7 (low need) by 23.4% of respondents. In addition, transportation was mentioned as a challenge by 27.8% of respondents and medical services was listed as a challenge by 22.2%. It wasn't listed by a large percentage of people, but a small minority do still find transportation and access to medical services an issue.

2020 Full Survey Data. A number of questions on the full survey related to resources and awareness. Specifically, three areas were addressed – transportation, use of services, and knowledge and usage of 211. The following shows responses related to transportation questions:

Table 6-5: Survey – Transportation Related Questions

Question	'Yes' Responses	
	N	**Percent**
Do you have access to transportation? (N=351)	338	96.3
Can you afford transportation services? (N=92)	51	55.4
When do you need transportation services?		
7AM-5PM Weekdays	*25*	
Weekdays After 5PM	*13*	
Weekends	*15*	
Does a lack of transportation keep you from finding employment? (N=75)	11	14.7
Are you able to maintain employment without transportation? (N=65)	27	41.5
Can you keep medical appointments in Logan County? (N=87)	80	92.0
Can you keep medical appointments outside of Logan County? (N=86)	74	86.5

The majority of respondents indicated that they do have access to transportation. However, a small minority (14.7%) indicated that a lack of transportation keeps them from finding employment. Although not a major issue, it is one that needs to be addressed. Because transportation had been a

specific issue in certain parts of Logan County, an attempt was made to ascertain if this was still the case. Unfortunately, there were not enough respondents both indicating location and answering transportation-related questions to make an assessment.

There were no similar questions on the 2018 survey. The closest questions were the ones discussing community needs. For instance, in the 2018 survey, 34.0% of respondents indicated that public transportation on evenings and/or weekends was a big problem.

Respondents were also asked if they had used any government-related services in the past 12 months. The most common service reported was Medicare/Medicaid (N=129), followed by the food bank/food pantry (N=118). Use of the food bank/food pantry may have been prompted by the economic downturn due to the pandemic.

The last issue discussed on the survey related to this priority is the knowledge of the 211 system. A total of 327 people responded to this question and 216 (66.1%) indicated that they were aware of 211. This is a substantial majority, but there are still some that are not aware of the service.

Demographics/Social Determinants

Previous Data

Ohio tends to rank in the low to middle ground on many measures of poverty and income. The following are county health rankings from 2018-2020. The data are included under 'previous data' because of the time lapse in data collection. The 2020 rankings were based on data collected in 2018 and earlier:

Table 7-1: Community Health Rankings – Logan County

	2018	2019	2020
HEALTH OUTCOMES	**40**	**42**	**44**
Length of Life *Includes a measure of premature death*	46	48	45
Quality of Life *Includes measures of poor or fair health, poor physical health days, poor mental health days, and low birthweight*	36	37	45
HEALTH FACTORS	**25**	**27**	**32**
Health Behaviors *Includes measures of adult smoking, obesity, food environment index, physical inactivity, exercise opportunities, excessive drinking, alcohol-impaired driving, sexually transmitted infections, and teen births*	34	36	47
Clinical Care *Includes measures of uninsured, primary care physicians, dentists, mental health providers, preventable hospital stays, mammography, and flu vaccinations*	25	46	47
Social/Environmental Factors *Includes measures of high school graduation, college attendance, unemployment, children in poverty, income inequality, children in single-parent households, social associations, violent crime, and injury deaths*	31	30	28
Physical Environment *Includes measures of air pollution, drinking water violations, severe housing problems, driving alone to work, and long commute*	16	11	8

As of 2018 and earlier, Logan County is ranked high in physical environment and social/environmental factors and in the middle of 88 counties in the other areas.

This matches data provided by the U.S. Census. Based on data from 2014-18, 86.9% of people were living in the same house for at least one year, 91.3% reported a high school diploma or higher, 62.6% were in the civilian labor force, and 11.4% were in poverty,

Talk Poverty provided the following data for 2018:

Table 7-2: Data from Talk Poverty

	2018 Data	
	Data	**Ranking**
Poverty	13.9%	35
Poverty by Subgroup		
Children	*19.2%*	
African-Americans	*28.7%*	
Latinos	*23.8%*	
Income Inequality Ratio	15.2	28
Unemployment	4.6%	43

Source: www.talkpoverty.org

The data are very similar to census and health ranking data. Since the data are collected at slightly different times and aggregated via different methods, there will be slight variations, but the general consensus is that Logan County is very similar to the state and nation on measures of poverty, unemployment and other indicators reflecting 'social determinants.'

Current Situation

Youth Developmental Assets. One of the social determinants of health is the foundation of youth. A Search Institute Survey done in late 2019 examined 'youth developmental assets' which were basically external resources such as positive family communication, safety, adult role models, and youth programs and internal resources such as school engagement, integrity and honesty, interpersonal competence, and self-esteem. The following details the percentage of students indicating each asset:

Table 7-3: Youth Developmental Assets – Search Survey

	Total	Gender		Grade		
		Male	Female	8	10	12
External Assets						
Family Support	*78*	*84*	*73*	*79*	*73*	*82*
Positive Family Communication	*32*	*34*	*30*	*33*	*35*	*22*
Other Adult Relationships	*59*	*67*	*54*	*67*	*55*	*51*
Caring Neighborhood	*41*	*49*	*35*	*43*	*43*	*27*
Caring School Climate	*47*	*57*	*39*	*51*	*45*	*43*
Parent Involvement in Schooling	*31*	*31*	*32*	*38*	*31*	*18*
Community Values Youth	*26*	*34*	*20*	*29*	*23*	*22*
Youth as Resources	*34*	*39*	*31*	*42*	*31*	*22*
Service to Others	*52*	*53*	*51*	*54*	*46*	*62*
Safety	*44*	*63*	*30*	*35*	*46*	*61*
Family Boundaries	*60*	*61*	*60*	*66*	*62*	*38*
School Boundaries	*67*	*68*	*65*	*75*	*64*	*53*
Neighborhood Boundaries	*46*	*48*	*46*	*53*	*44*	*32*
Adult Role Models	*35*	*41*	*31*	*35*	*37*	*31*
Positive Peer Influence	*74*	*79*	*71*	*80*	*71*	*66*
High Expectations	*66*	*75*	*58*	*75*	*53*	*73*
Creative Activities	*16*	*19*	*13*	*15*	*19*	*11*
Youth Programs	*64*	*66*	*63*	*58*	*72*	*58*
Religious Community	*42*	*44*	*41*	*42*	*46*	*31*
Time at Home	*67*	*72*	*63*	*72*	*68*	*56*
Internal Assets						
Achievement Motivation	*78*	*71*	*84*	*81*	*74*	*76*
School Engagement	*84*	*85*	*84*	*85*	*84*	*84*
Homework	*34*	*25*	*40*	*29*	*44*	*22*
Bonding to School	*74*	*74*	*73*	*78*	*74*	*62*
Reading for Pleasure	*17*	*14*	*19*	*19*	*14*	*18*
Caring	*70*	*56*	*79*	*70*	*69*	*69*
Equality and Social Justice	*73*	*61*	*81*	*75*	*71*	*71*
Integrity	*80*	*73*	*86*	*75*	*83*	*86*
Honesty	*83*	*81*	*85*	*85*	*81*	*84*
Responsibility	*82*	*84*	*81*	*79*	*79*	*95*
Restraint	*50*	*53*	*47*	*69*	*38*	*29*
Planning and Decision Making	*36*	*33*	*37*	*34*	*39*	*33*
Interpersonal Competence	*57*	*49*	*63*	*61*	*55*	*53*
Cultural Competence	*46*	*39*	*52*	*51*	*43*	*42*
Resistance Skills	*50*	*48*	*51*	*50*	*54*	*40*
Peaceful Conflict Resolution	*42*	*41*	*42*	*37*	*45*	*47*
Personal Power	*42*	*59*	*32*	*41*	*41*	*49*
Self-Esteem	*41*	*59*	*29*	*42*	*39*	*42*
Sense of Purpose	*54*	*69*	*44*	*53*	*51*	*60*
Positive Value of Personal Future	*71*	*72*	*70*	*70*	*71*	*73*

Source: Search Institute

The external asset with the highest percentage was family support, followed by positive peer influence, while the asset with the lowest percentage was creative activities. The internal assets that were relatively high included achievement motivation, school engagement, bonding to school, integrity,

honesty, responsibility, and positive value of personal future. The one internal asset that was relatively low was reading for pleasure.

Some assets varied by gender. The external assets with a large difference included caring school climate, safety, and high expectations with males reporting higher levels. The internal assets with a large difference included homework, caring, equality and social justice, personal power, self-esteem, and sense of purpose. Females were more likely to report homework, caring, and equality and social justice. Males were more likely to report personal power, self-esteem, and a sense of purpose.

A lot of the assets varied by grade level. In general, older students tended to report assets to a lower extent than younger students. For external assets, this was especially true for parent involvement in schooling, youth as resources, boundaries (family, school, and neighborhood), Interestingly, 12th grade students were more likely to report safety than other groups. For internal assets, 10th grade students reported more homework than other groups and 12th graders reported the lowest restraint.

Unemployment Estimates. The percentage of people unemployed has been extremely volatile in 2020. The following tracks the unemployment rate in Logan County, Ohio, and the nation from January 2019 through October 2020:

Chart 7-1: Unemployment Trends

Source: Ohio Department of Job and Family Services

As with the country and state, Logan County had a spike in April 2020 due to COVID-19 shutdowns. Logan County was hit particularly hard because a

major employer, Honda, laid off employees temporarily. Trends in the last part of 2020 have become somewhat more stable. According to the civilian labor force, the rate for Logan County in August of 2020 was 7.0% and in October of 2020 was 4.0%, so it is slowly going back to pre-COVID rates.

CHWP Data. CHWP does a 'social determinants of health' survey. The following are the results for 2018-2020:

Table 7-4: CHWP Data – Social Determinants of Health Survey

	2018		2019		2020	
	N	%	N	%	N	%
DEMOGRAPHICS						
Race/Ethnicity						
Percent White/Caucasian	*7444*	*97.0*	*7566*	*97.1*	*6486*	*97.0*
Percent Non-Hispanic	*7593*	*98.3*	*7674*	*98.5*	*6586*	*98.5*
Migrant						
Percent Indicating Migrant Status	*7676*	*.1*	*7710*	*.02*	*6379*	*.02*
Veteran						
Percent Indicating Veteran Status	*7678*	*4.5*	*7716*	*4.2*	*6379*	*4.6*
Gender						
Female	*7627*	*56,3*	*7697*	*56.2*	*6590*	*56.7*
Male	*7627*	*43.6*	*7697*	*43.7*	*6590*	*43.2*
Transgender/Other	*7627*	*.1*	*7697*	*.1*	*6590*	*.1*
SOCIAL DETERMINANTS						
Percent Homeless	*7667*	*.3*	*7696*	*.2*	*6371*	*.1*
Poverty						
100% or Below	*1816*	*17.9*	*1955*	*19.2*	*2106*	*20.4*
101-150%	*1816*	*15.7*	*1955*	*16.2*	*2106*	*15.7*
151-200%	*1816*	*15.7*	*1955*	*15.3*	*2106*	*16.5*
Above 200%	*1816*	*50.7*	*1955*	*49.3*	*2106*	*47.4*
Percent Indicating Insecurity						
Food	*2629*	*1.6*	*3003*	*2.1*	*3039*	*2.0*
Utilities	*2626*	*1.4*	*2997*	*1.8*	*3033*	*1.7*
Phone	*2613*	*,9*	*2981*	*1.3*	*3016*	*1.2*
Medical	*2626*	*1.5*	*2995*	*1.8*	*3031*	*1.7*
Clothing	*2614*	*1.0*	*2986*	*1.4*	*3023*	*1.5*
Insurance						
Private	*7617*	*48.7*	*7778*	*47.6*	*6845*	*46.0*
Medicaid	*7617*	*20.4*	*7778*	*21.2*	*6845*	*21.8*
Medicare	*7617*	*30.9*	*7778*	*31.2*	*6845*	*32.2*
Stress						
Percent Indicating at least "a little bit'	*2664*	*57.8*	*3044*	*60.2*	*3078*	*59.9*

Note: Responses of 'ignore', 'unreported', 'choose not to disclose', etc. are not included in totals
Source: CHWP Social Determinants of Health Survey Data

As with other measures of social determinants, there is a lot of stability. From racial and ethnic makeup to poverty to insecurity to lack of insurance to stress, the numbers are similar across the three years.

Key Informant Interviews – Hispanic Population. One social determinant of health is race and ethnicity. A small portion of residents in Logan County are Hispanic. With the recent racial unrest in the news, how is this group being affected? Interviews were done with two large employers working with Hispanic residents. In general, the interviews paint a picture that fits a typical stereotype. Both of the interviews were with employers in the agriculture field. It is common for people with a language barrier to obtain the jobs that they can – jobs that do not require a lot of communication in English. In general, the employers felt the residents were able to get the services they need, but did have some difficulties due to a language barrier and sometimes lack of transportation.

Key Informant Interview – Amish Population. Only one interview was done with a member of the Amish population. Although not able to speak for all Amish, some of the responses included that they were grateful for self-pay prices at the hospital to come down, they postulated that parent involvement is important for combatting drug use, and that they do not like to wear masks (fog up glasses, hard to read lips), but there are varying opinions in the community (as in other communities).

Survey Responses – African-American Population. There were 11 individuals who completed the full survey and identified as African-American. In terms of demographics, they were all over 50 years old, slightly more females than males, half were married, half had at least some college education, had a mix of household incomes, and only three were unemployed.

In terms of mental health, only two indicated depression symptoms, and none indicated either thoughts of suicide or mental health issues preventing them from their daily activities. Only one indicated that they or a member of their family had been diagnosed with a mental illness. A few did indicate abuse history, however.

In terms of substance abuse, only half indicated drinking and none indicated frequent drinking (10 or more days and/or more than 4 drinks). Only one indicated use of nicotine products and only one indicated knowing someone who is a user.

In terms of health issues, only one person indicated not exercising. All but one indicated having a general healthcare provider (that person said they didn't need one) and six out of 10 said they had a routine medical checkup within the past year. Interestingly, seven indicated seeing a doctor outside of

Logan County (a number mentioned mammograms/breast exams). However, only five (out of 11) had a regular dental checkup. All African-American respondents indicated having health insurance.

The other two issues are homelessness and resources and awareness. None of the African-American respondents reported being homeless within the past six months. Four people out of nine who responded indicated that they were aware of the 211 information system, and the African-American respondents did not report any serious issues with transportation.

In general, there were no indications that any one issue was affecting the African-American community in a more significant way than other groups. More information needs to be gathered, but it doesn't seem as any one concern is showing itself.

Conclusions/General Findings

Needs Identified – Fall 2020

In the condensed survey, residents were asked to rank a number of 'areas of need' from 1-7. The following are the responses:

Table 1: Needs Identified on 2020 Condensed Survey

		Low (6-7)		Medium (3-5)		High (1-2)	
Area of Concern	**Total N**	**N**	**%**	**N**	**%**	**N**	**%**
Housing and Homelessness	131	35	26.7	65	49.6	31	23.7
Access to Resources	128	31	24.2	73	57.0	24	18.8
Obesity	121	54	44.7	40	33.0	27	22.3
Substance Abuse	132	32	24.2	41	31.0	59	44.7
Maltreatment of Children	130	19	14.6	73	56.2	38	29.3
Workforce Development	141	33	23.4	71	50.3	37	26.2
Mental Health	147	25	17.0	58	39.5	64	43.5

The two areas which had the highest percentages for 'high need' were substance abuse and mental health. These coincide with two of the priorities set forth. Mental health issues and substance abuse issues have been brought to the forefront with COVID-19 and it is crucial that Logan County has the capacity to handle the demand for services.

The answers are slightly different than in 2018. The following were the findings from the 2018 survey for similar items:

Table 2: Community Issues from 2018 Survey

	Percent Responding			
Area of Concern	**Not a Problem**	**Small Problem**	**Medium Problem**	**Big Problem**
Homelessness	12.3	49.7	28.3	9.7
Access to Resources	NA – Not included in 2018			
Adult Obesity	3.3	12.0	41.1	43.6
Drug Abuse	2.8	2.5	8.9	85.7
Child Abuse	5.7	21.0	45.2	28.2
Unemployment	13.1	35.4	35.9	15.6
Mental Health	4.2	20.6	45.7	29.6

Substance abuse has remained a high area of concern. However, respondents tended to place mental health issues as a greater concern in 2020 than in 2018. This may be partially due to the fact that the 2020 survey had a larger percentage of young adult respondents – the group that tends to struggle the most with mental health. It may also be at least partially due to the impacts of COVID-19 on mental health.

Conclusions by Priority Area

The following are some general conclusions by priority area:

Mental Health. Mental health issues are still a concern, with all age groups, not just young adults. The capacity seems to be there for now, but Logan County needs to continue to push to meet an increased demand for services. Capacity is stretched to its limit and additional capacity will likely be needed as demand continues to increase.

Substance Abuse. The findings here are similar to mental health. There seems to be an increased demand, but it is being met at this point. One issue that should be tracked in the future is e-cigarette use and the fact that there may be an increase in demand. In addition, any future developments with COVID-19 may have an effect on substance abuse issues.

Healthy Living. The positive is that people do seem to have access to healthcare and to be getting regular routine care. The potential challenges are that the obesity issue is still there, along with the health issues that surround it. Almost half of persons coming into Mary Rutan Hospital or Community Health and Wellness partners were considered obese. This percentage is higher than state and national averages. In addition, it is a strong factor underlying the need for treatment for issues such as diabetes, heart attack, high blood pressure, and stroke.

In the upcoming months, there are a lot of unknowns when it comes to COVID-19. The availability and effectiveness of a vaccine is unknown and it is likely that, until an effective vaccine is administered on a widespread basis, cases are going to continue to increase. Logan County must continue to use any resources available to combat this potential influx of cases.

Safe and Healthy Families. People do seem to be able to access the services they need and the level of crime in the community does not seem to be high. Additionally, the child abuse/neglect rate and the rate of children in foster care remained relatively stable from 2018 to 2019. The recommendation

here is to continue to provide resources to police and government agencies so that they can do their job of helping to keep residents safe and healthy.

Housing and Homelessness. This area does not seem to be one of the biggest concerns. The data from the homeless shelter is encouraging, and more awareness is needed in that respect. One word of caution is the coming of potential evictions due to COVID-19.

Resources and Awareness. The biggest current issue with resources and awareness is that many resources have gone online. Any improvement of infrastructure and broadband Internet access is welcome and will only become more crucial in the future.