2019

Community Health Needs Assessment DETAILED DATA INDEX



Akron Children's Hospital Mahoning Valley Beeghly Campus 6505 Market Street Boardman, Ohio 44512

www.akronchildrens.org



Table of Contents

Appendix A: Ad Hoc Committee Members	
Appendix B: Data Sources	
Appendix C: Detailed Data Index	6
Access to Medical Providers	
Affordable Housing & Eviction	
Asthma & Respiratory Care	
Behavioral Health: Mental Health	
Behavioral Health: Youth Substance Use	
Birth Outcomes	
Child Mortality	
Health Equity & Race	
Income & Child Poverty	
Infant Mortality	
Lead Poisoning	
Nutrition & Food Access	
Obesity and DiabetesOral Health	
Physical Activity & Recreation	
Child Screen Time	
Transportation	
Unintentional Injuries.	
·	
Appendix D: Focus Group Summary	
Health Challenges	
Missed Appointments	
Healthy Choices	
Housing	
Schools	
LGBTQ	
Trust	
Needs from Hospital System	
Appendix E: Key Informant Interview Summary	57
Access to Medical Providers	57
Adverse Childhood Experiences & Childhood Trauma	
Asthma & Respiratory Care	
Behavioral Health	
Behavioral Health Providers	59
Birth Outcomes	60
Caregiver Substance Use	60
Crime	
Employment	
Foster Care	
Health Education & School Based Services	62

Health Equity & Race	63
Health Insurance Access	63
Housing & Eviction	63
Income & Poverty	64
Infant Mortality	
Nutrition & Food Access	
Obesity & Diabetes	66
Oral Health	66
Physical Activity & Screen Time	
Transportation	67
Youth Substance Use	68
Appendix F: Progress Since Last Assessment	69

Appendix A: Ad Hoc Committee Members

The Ad Hoc Committee was composed of individuals from Akron Children's Hospitals that considered qualitative and quantitative data and information on significant health needs to identify priorities for the next 3-5 years.

Dr. Steven Bacak Dr. Michael Bigham Roula Braidy Shelly Brown Dr. Norm Christopher Dr. Joel Davidson Mary Douglas Dr. Michael Forbes Kris Grayem Dr. Jennifer Grow Sharon Hrina Milva Holley Courtney Hudson Dr. Steven Jewell Dr. Mike Kelly Alicia LaMancusa Dr. Timothy Lee Shawn Lyden

Luann Maynard Dr. Robert McGregor Dr. Paul McPherson Annette Mitzel Anne Musitano Karen Richter Dr. Elena Rossi Dr. Jennifer Manning Jodi Simon Dr. Steven Spalding Doug Straight Lisa Taafe Lauren Trohman Dr. Brad Van Sickle Dr. Cooper White Michele Wilmoth Bernett L. Williams Heather Wuensch

Appendix B: Data Sources

- American Academy of Child & Adolescent Psychiatry, Workforce Maps by State
- Area Health Resource File, Accessed via County Health Rankings
- Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files, Accessed via County Health Rankings
- CDC WONDER mortality data (Compressed Mortality File) (2011-2017), accessed via County Health Rankings
- CDC, derived from the American Medical Association Masterfile, 2015
- CDC, National Environmental Public Health Tracking Network
- Child and Adolescent Health Measurement Initiative, 2016-2017 National Survey of Children's Health (NSCH)
- Children's Safety Network, "2016 Fact Sheets" using 2012 State Inpatient Databases (SID), Healthcare Cost and Utilization Project (HCUP), Agency for Healthcare Research and Quality (AHRQ)
- Coalition for a Drug Free Mahoning County, 2018 PEP Survey
- Eviction Lab
- FBI Uniform Crime Reporting Program (2014 & 2016), Accessed via County Health Rankings
- Feeding America, Map the Meal Gap
- National Survey on Drug Use and Health, 2014, 2015, and 2016
- Ohio Death Records, Compiled by The Center for Community Solutions
- Ohio Department of Health Death Certificate Files , 2016-2018, accessed via Summit County Public Health Statewide Mortality Dashboard
- Ohio Department of Health, "Make Your Smile Count! Third Grade Oral Health Screening Survey, 2013-15"
- Ohio Department of Health, "The Burden of Asthma in 2012"
- Ohio Department of Health, Accessed Via networkofcare.org dashboards
- Ohio Department of Health, Bureau of Vital Statistics
- Ohio Department of Health, Ohio Public Health Information Warehouse
- Ohio Department of Job and Family Services, Calculations by CDF-Ohio, accessed via Kids Count Data Center
- Ohio Department of Job and Family Services, via Kids Count Data Center
- Ohio Department of Youth Services, accessed via Kids Count Data Center
- Ohio Hospital Association Data, Compiled by Akron Children's Hospital
- Ohio Human Trafficking Task Force Report
- Ohio Medicaid Assessment Survey, 2017
- Trumbull County Schools, Pride Surveys Questionnaire for Grades 6 12 Standard Report, 2017-2018
- SAMHSA, Center for Behavioral Health Statistics and Quality

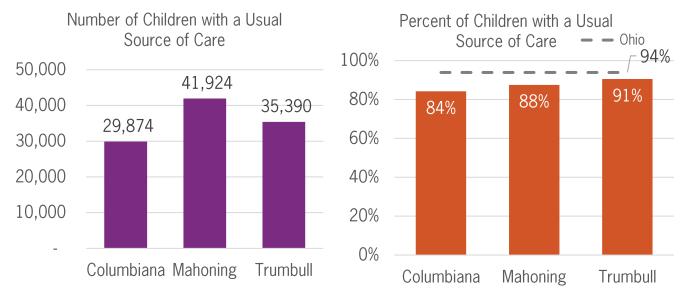
Appendix C: Detailed Data Index

The Center for Community Solutions compiled secondary data on children's health and related issues for this Community Health Needs Assessment. Presented below is the information which was used to identify significant health needs. They included data on health conditions, heath factors, social determinants of health, and other indicators which provide context to evaluate health data. Topics are listed in alphabetical order.

Access to Medical Providers

Usual Source of Care among Children

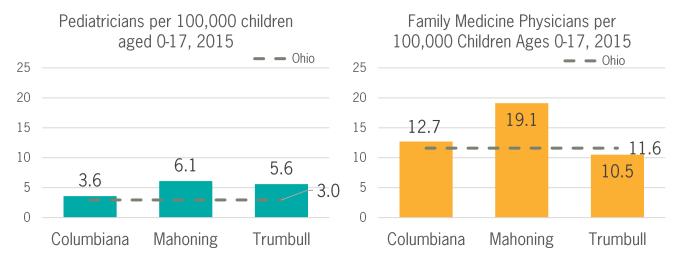
Source: Ohio Medicaid Assessment Survey, 2017



Pediatricians and Family Medicine Physicians

Source: CDC, derived from the American Medical Association Masterfile, 2015

Note: Ohio value shown is the median for all 88 counties.

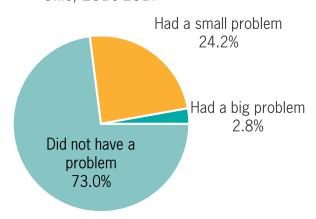


Problems Obtaining Specialist Care (Ohio)

Source: Child and Adolescent Health Measurement Initiative. 2016-2017 National Survey of Children's Health (NSCH)

Note: The Ohio rate of 27.0 percent who had a problem is lower than the national rate of 27.7 percent.

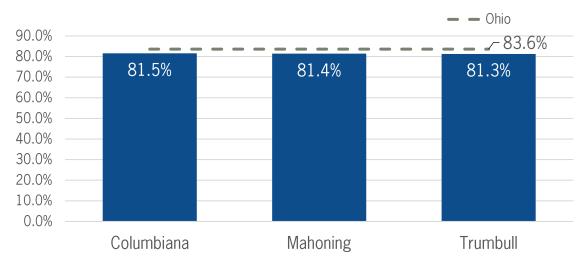
Problems Obtaining Specialist Care for Those Who Received or Needed It, Ohio, 2016-2017



Preventive Medical Visit

Source: County-level estimates calculated by The Center for Community Solutions based on data from Child and Adolescent Health Measurement Initiative. 2016-2017 National Survey of Children's Health (NSCH)

Children With One or More Preventive Visits in the Past Year

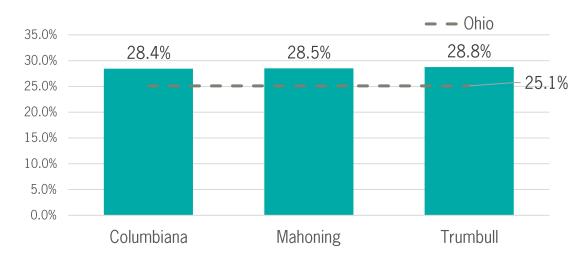


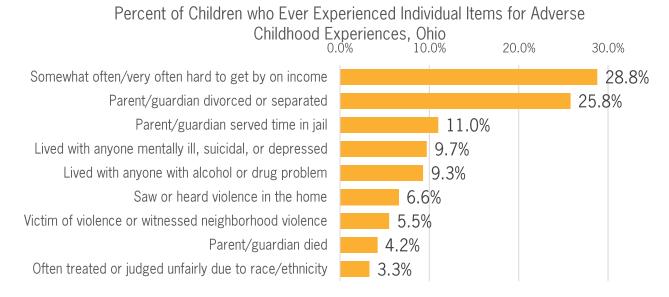
Adverse Childhood Experiences (ACEs) and Trauma

Adverse Childhood Experiences

Source: County-level estimates calculated by The Center for Community Solutions based on data from Child and Adolescent Health Measurement Initiative. 2016-2017 National Survey of Children's Health (NSCH)

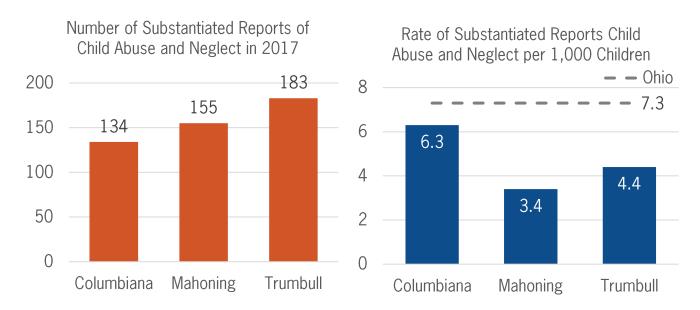
Children (Age 0-18) Who Have Ever Experienced 2 or More ACEs



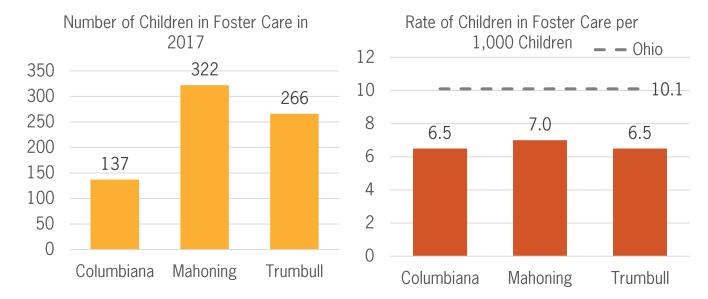


Child Abuse and Neglect

Source: Ohio Department of Job and Family Services, via Kids Count Data Center

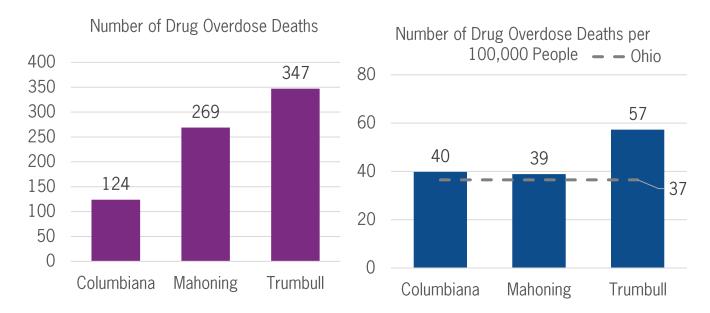


Foster Care Source: Ohio Department of Job and Family Services, Calculations by CDF-Ohio, accessed via Kids Count Data Center



Overdose Deaths (All Ages)

Source: CDC WONDER mortality data (Compressed Mortality File) (2015-2017), accessed via County Health Rankings

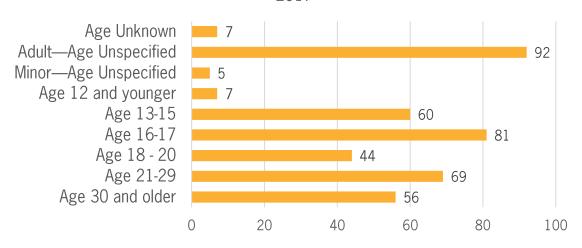


Human Trafficking

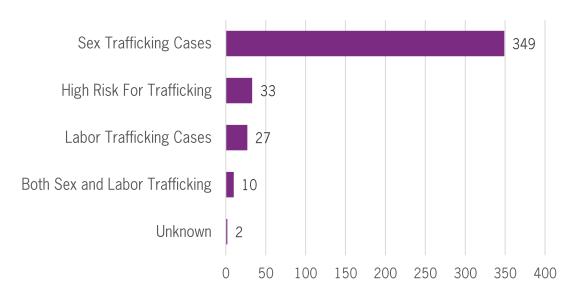
Source: Ohio Human Trafficking Task Force Report



Number of Human Trafficking Victims by Age in the State of Ohio in 2017

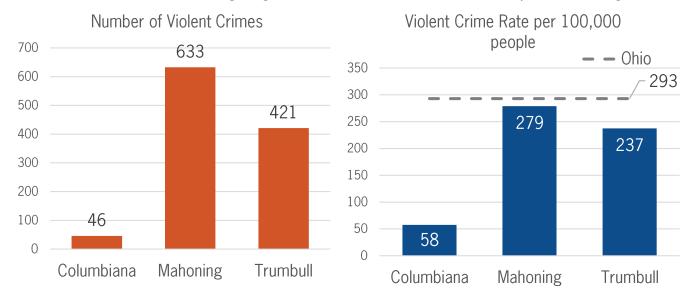


Number of Human Trafficking Cases by Type in the State of Ohio in 2017



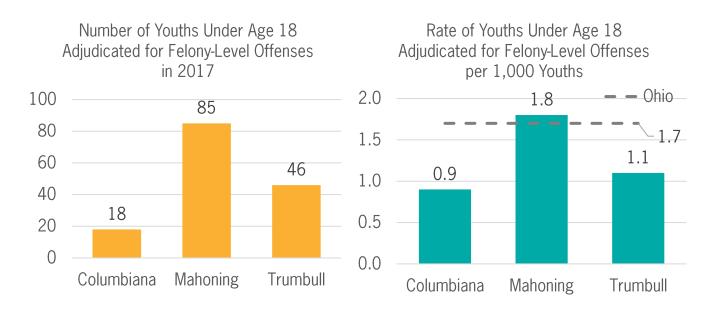
Violent Crime

Source: FBI Uniform Crime Reporting Program (2014 & 2016), Accessed via County Health Rankings



Youth Felony-Level Offenses

Source: Ohio Department of Youth Services, accessed via Kids Count Data Center

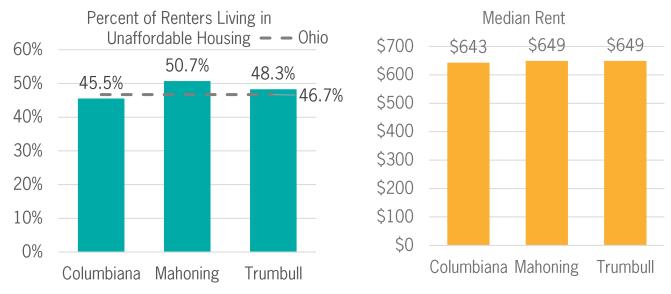


Affordable Housing & Eviction

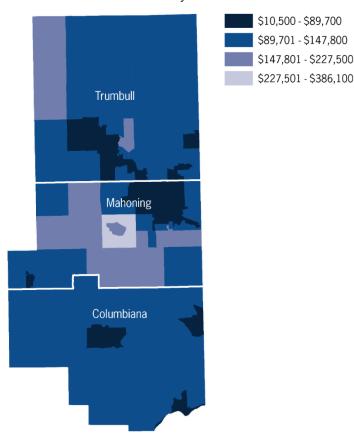
Access to Affordable Housing

Source: U.S. Census Bureau American Community Survey 2017 5-Year Estimates

NOTE: Housing is considered unaffordable if it costs 30% or more of the gross household income.

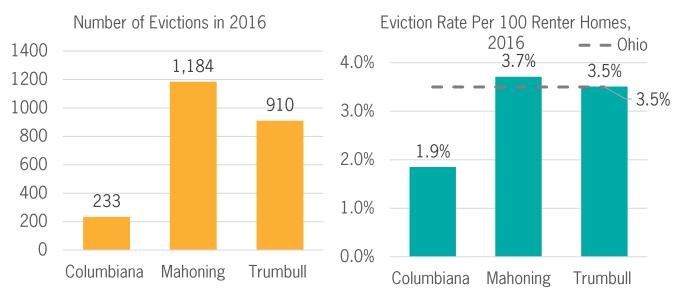


Median Value of Owner-Occupied Units, by Census Tract

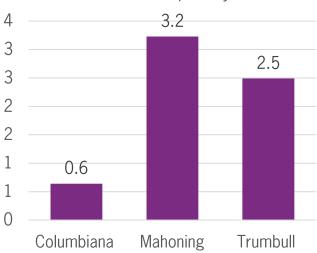


Evictions

Source: Eviction Lab



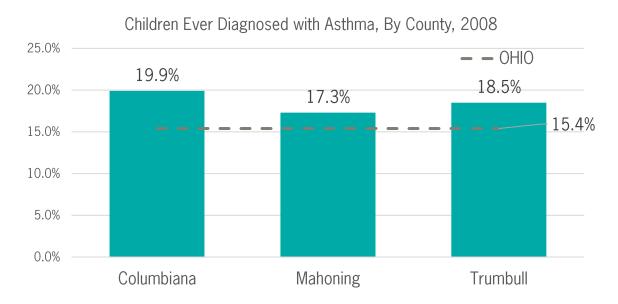




Asthma & Respiratory Care

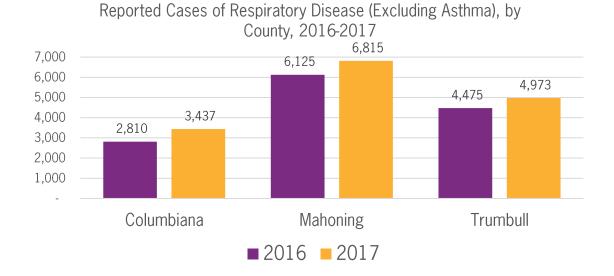
Children with Asthma

Source: Ohio Department of Health, "The Burden of Asthma in 2012"



Asthma & Respiratory Disease Hospital Visits

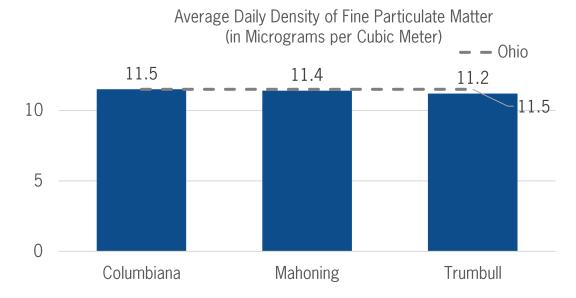
Source: Ohio Hospital Association Data, Compiled by Akron Children's Hospital Note: Age Group- 0-18, Inpatient and Emergency Department, Only Includes OHA Member Hospitals



Reported Cases of Asthma, by County, 2016-2017 7,000 6,000 5,000 4,000 3,000 2,000 940 936 1,000 321 244 203 314 Columbiana Trumbull Mahoning

2016 2017

Air Pollution Source: CDC's National Environmental Public Health Tracking Network

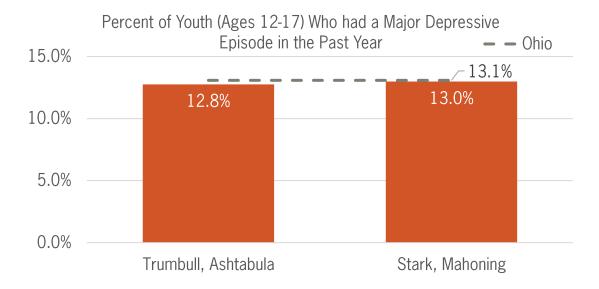


Behavioral Health: Mental Health

Major Depressive Episode

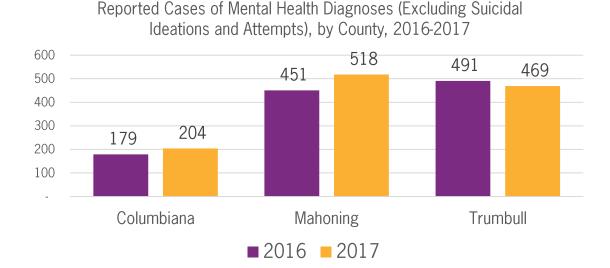
Sources: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health. 2014. 2015. and 2016

Notes: Data are provided for certain sub-state regions which often group several counties together, some of which are outside Akron Children's region. Major depressive episode (MDE) is defined as a period of at least 2 weeks when an individual experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms.

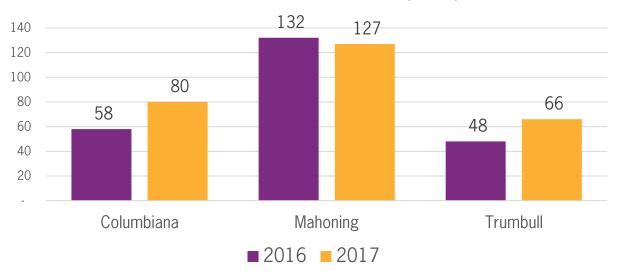


Mental Health Hospital Visits

Source: Ohio Hospital Association Data, Compiled by Akron Children's Hospital
Note: Age Group- 0-18, Inpatient and Emergency Department, Only Includes OHA Member Hospitals, Data
are suppressed where there are less than or equal to 25 cases



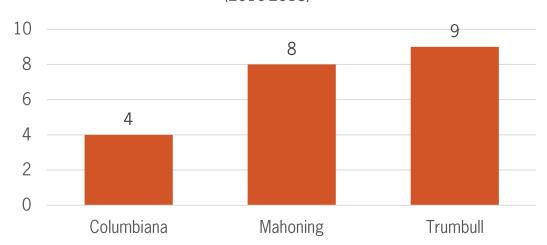
Reported Cases of Suicidal Ideations and Attempts, by County, 2016-2017



Youth Deaths by Suicide

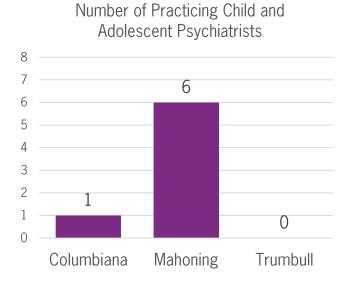
Source: Ohio Department of Health

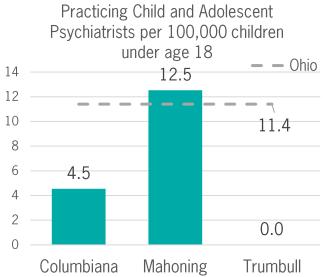
Number of Deaths by Suicide Among People Age 0-19 (2016-2018)



Mental Health Providers

Source: American Academy of Child & Adolescent Psychiatry, Workforce Maps by State

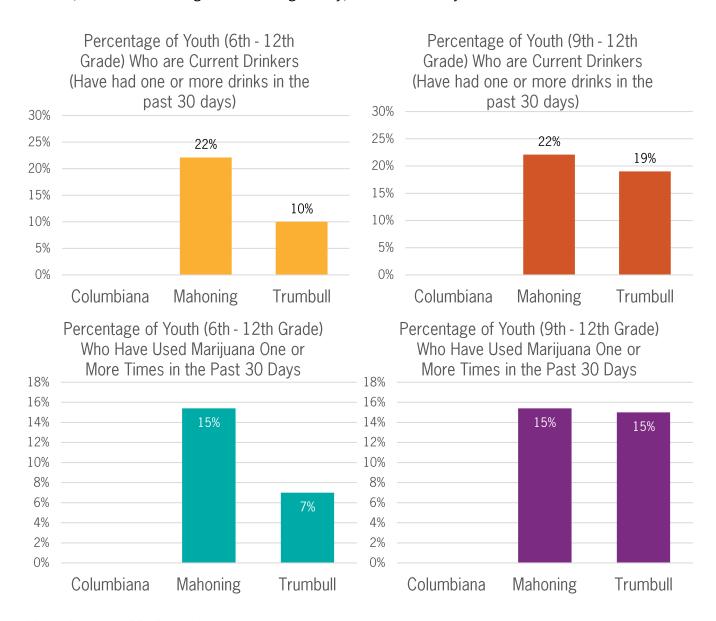




Behavioral Health: Youth Substance Use

Notes: Data are from different years, different age groups were surveyed, and different survey instruments were used; interpret differences with caution

Sources: Pride Surveys Questionnaire for Grades 6 thru 12 Standard Report, 2017-2018 Trumbull County Schools; Coalition for a Drug Free Mahoning County, 2018 PEP Survey

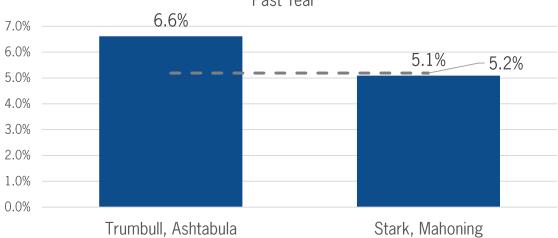


Youth Initiating Marijuana Use

Notes: Data are provided for certain sub-state regions which often group several counties together, some of which are outside Akron Children's region.

Sources: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016

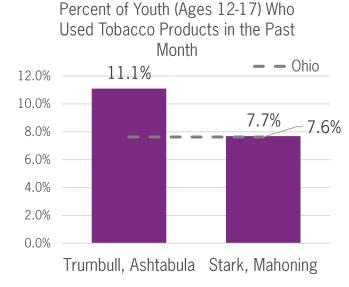
Percent of Youth (Ages 12-17) who Initiated Use of Marijuana in the Past Year



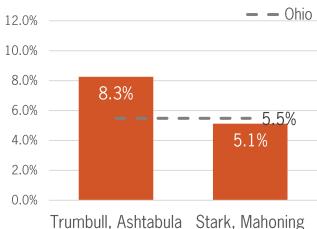
Youth Tobacco Use

Notes: Data are provided for certain sub-state regions which often group several counties together, some of which are outside Akron Children's region.

Sources: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014, 2015, and 2016



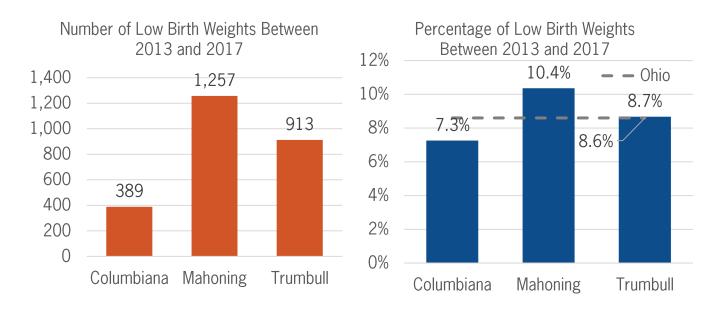
Percent of Youth (Ages 12-17) Who Smoked Cigarettes in the Past Month

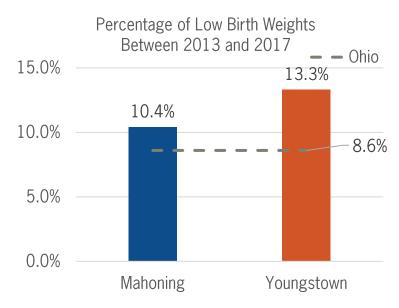


Birth Outcomes

Low Birth Weight

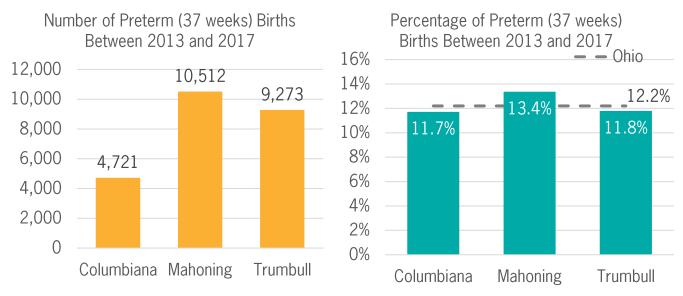
Source: Ohio Department of Health, Compiled by The Center for Community Solutions

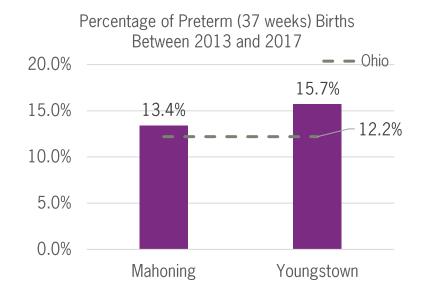




Preterm Births

Source: Ohio Department of Health, Compiled by The Center for Community Solutions

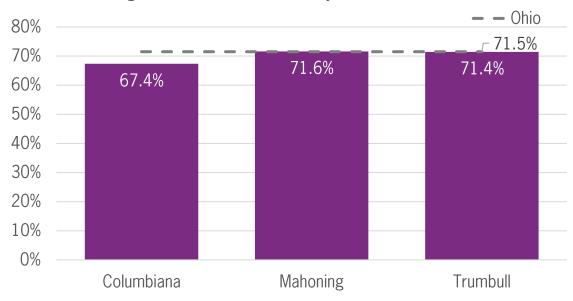




Prenatal Care

Source: Ohio Department of Health, Compiled by The Center for Community Solutions Note: Early prenatal care is pregnancy-related care beginning in the first trimester.

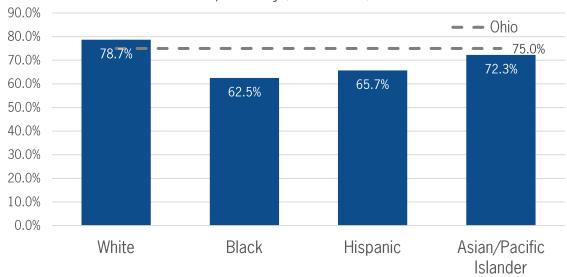
Percentage of Live Births that had Early Prenatal Care (2013-2017)

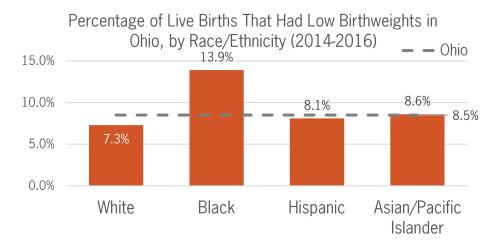


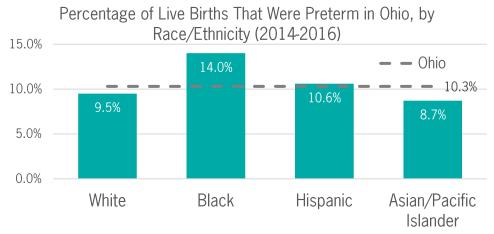
Birth Outcomes, by Race and Ethnicity, Ohio

Source: March of Dimes Peristats

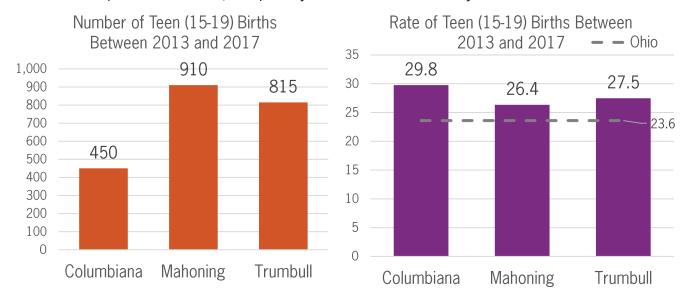








Teen Births
Source: Ohio Department of Health, Compiled by The Center for Community Solutions

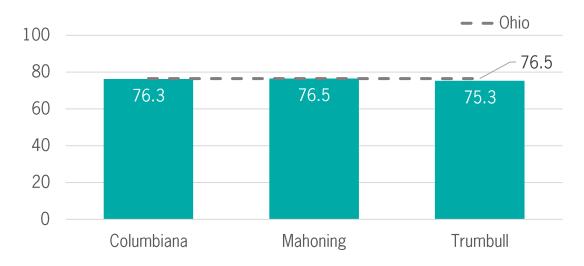


Child Mortality

Life Expectancy

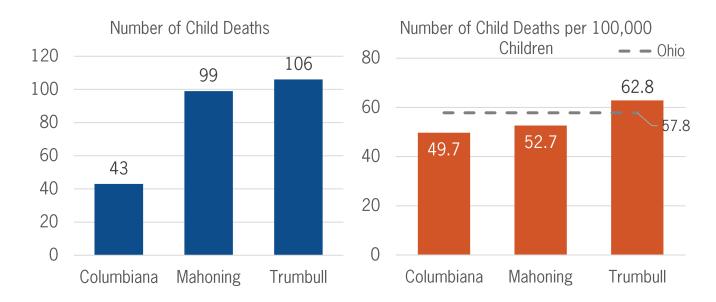
Source: Ohio Department of Health, Bureau of Vital Statistics

Life Expectancy at Birth Based on Current Mortality Rates



Child Mortality Rate

Source: CDC WONDER mortality data (Compressed Mortality File) (2014-2017), accessed via County Health Rankings

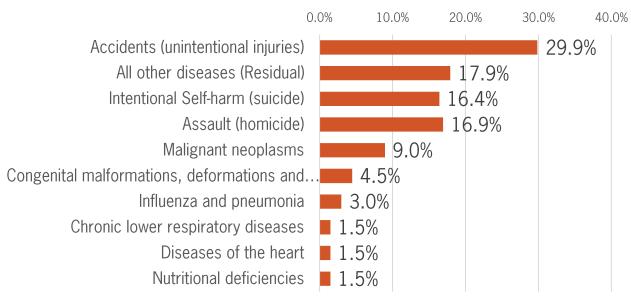


Leading Cause of Child Death

Source: Ohio Department of Health Death Certificate Files, 2016-2018, accessed via Summit County Public Health Statewide Mortality Dashboard

Note: Excludes infant mortality. Includes all 3 counties in the Mahoning Valley region.

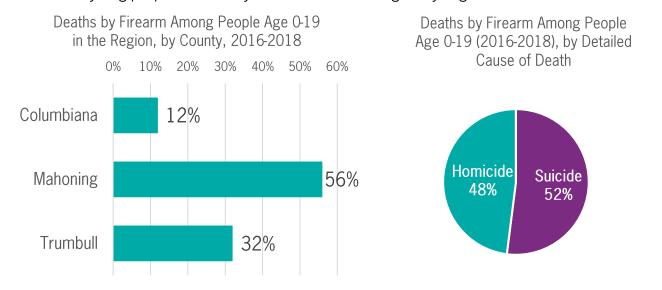
Mortality by Leading Cause of Death, 2016-2018, Ages 1-19



Youth Firearm Deaths

Source: Ohio Department of Health

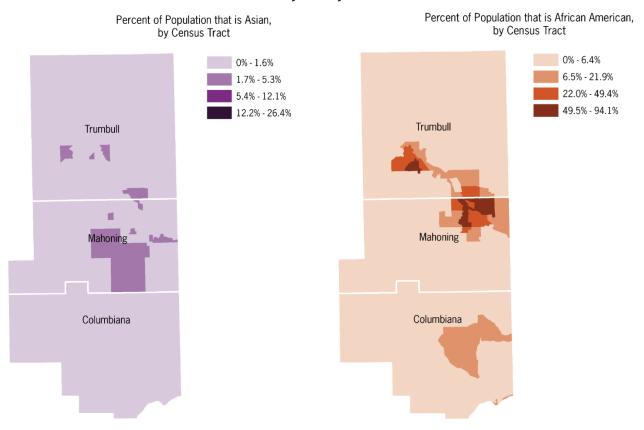
There were 25 young people who died by firearm in the Mahoning Valley Region in 2016-2018.

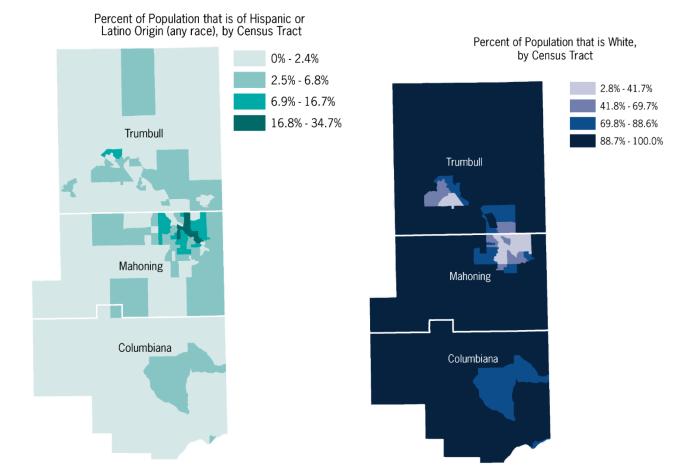


Health Equity & Race

Percent of Population by Race, Ethnicity

Source: U.S. Census Bureau American Community Survey 2017 5-Year Estimates

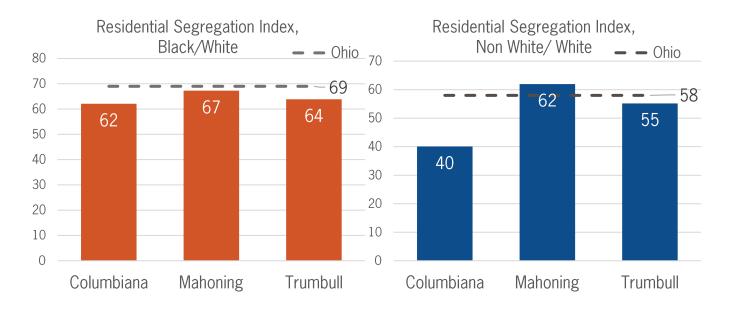




Residential Racial Segregation

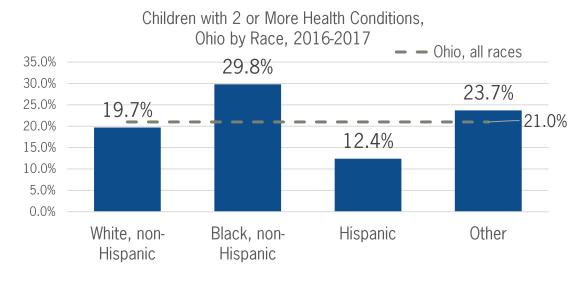
Source: U.S. Census Bureau American Community Survey 2017 5-Year Estimates

About this indicator: Racial/ethnic residential segregation refers to the degree to which two or more groups live separately from one another in a geographic area. The index of dissimilarity is a demographic measure of the evenness with which two groups (black and white residents, in this case) are distributed across the component geographic areas (census tracts, in this case) that make up a larger area (counties, in this case). The residential segregation index ranges from 0 (complete integration) to 100 (complete segregation). The index score can be interpreted as the percentage of either black or white residents that would have to move to different geographic areas in order to produce a distribution that matches that of the larger area.



Health Conditions by Race, Ohio

Source: Child and Adolescent Health Measurement Initiative. 2016-2017 National Survey of Children's Health (NSCH)



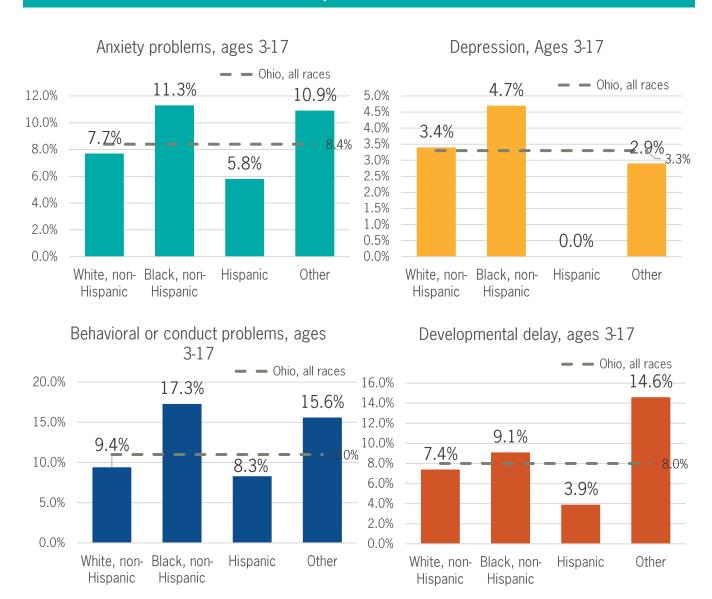


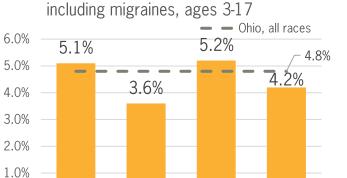
Hispanic

Hispanic

Hispanic

Hispanic





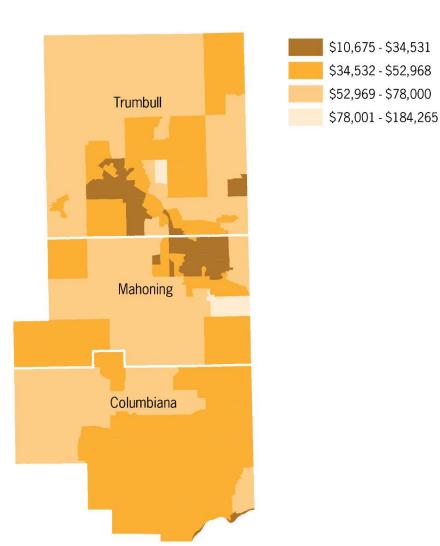
Frequent or severe headaches,

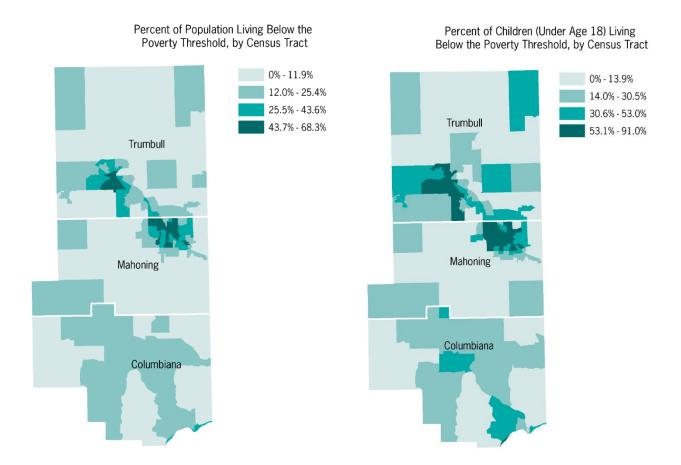
0.0%

Income & Child Poverty

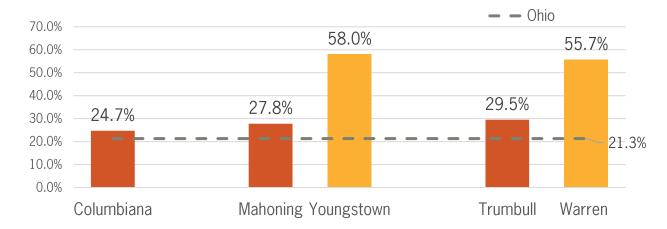
Data Source: U.S. Census Bureau American Community Survey 2015 5-Year Estimates

Median Household Income, by Census Tract

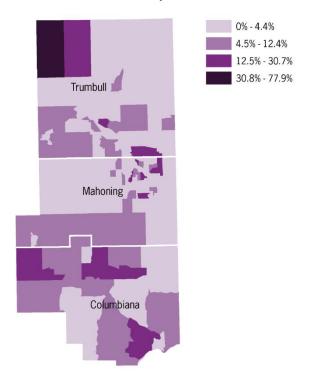




Percent Children (Ages 0-18) Below Poverty, 2017

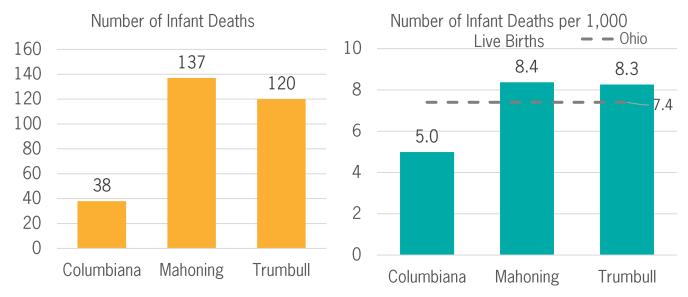


Percent of Children (Under Age 18) that are Uninsured, by Census Tract



Infant Mortality

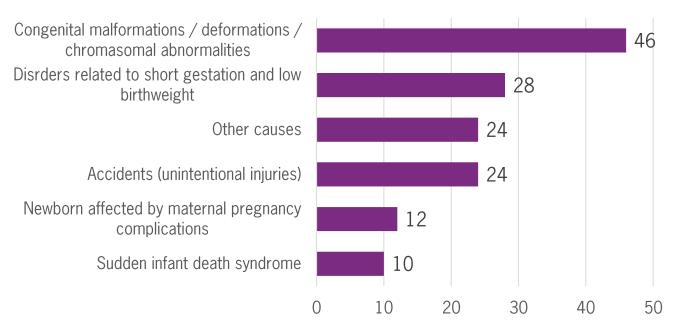
Source: CDC WONDER mortality data (Compressed Mortality File) (2011-2017), accessed via County Health Rankings



Causes of Infant Death

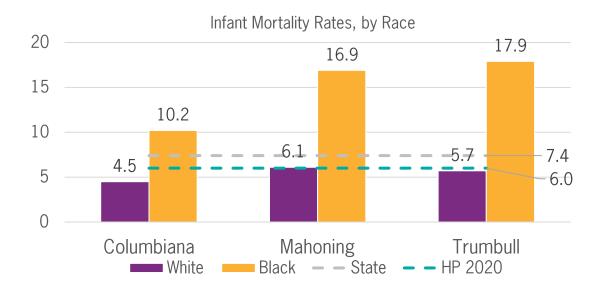
Source: Ohio Death Records, Compiled by The Center for Community Solutions

Causes of Infant Death Between 2012 and 2016



Infant Mortality by Race

Source: Ohio Department of Health, Accessed Via networkofcare.org dashboards

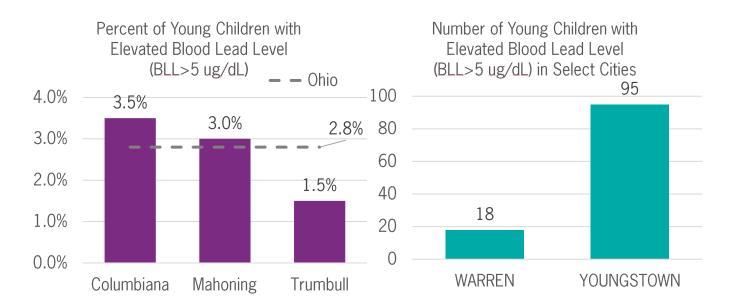


Lead Poisoning

Lead Poisoning Rate, Counties and Cities

Source: Ohio Department of Health, Ohio Public Health Information Warehouse

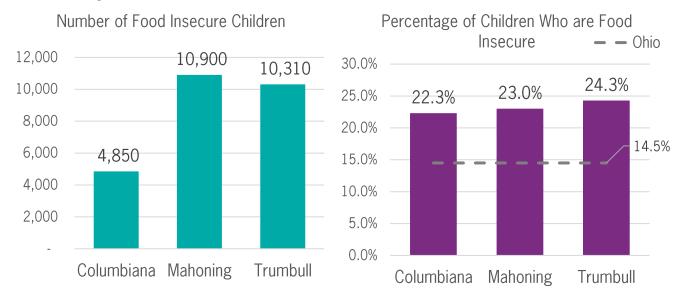
Note: Includes children less than six years of age, tested for lead in 2017. Children tested more than once in a calendar year are show only once. Blood lead levels reflect the highest confirmed test during the year. Cities with more than 100 lead tests per year are included.



Nutrition & Food Access

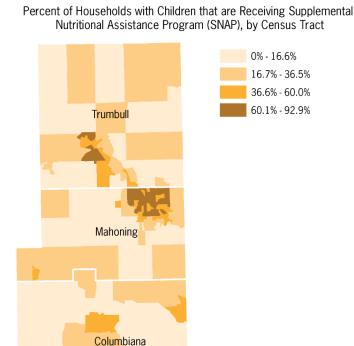
Child Food Insecurity

Source: Feeding America, Map the Meal Gap



SNAP Households with Children

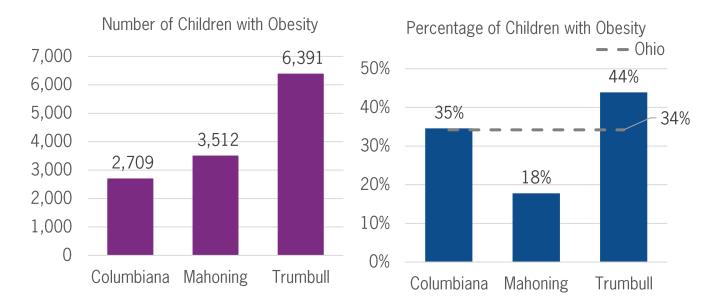
Data Source: U.S. Census Bureau American Community Survey 2017 5-Year Estimates



Obesity and Diabetes

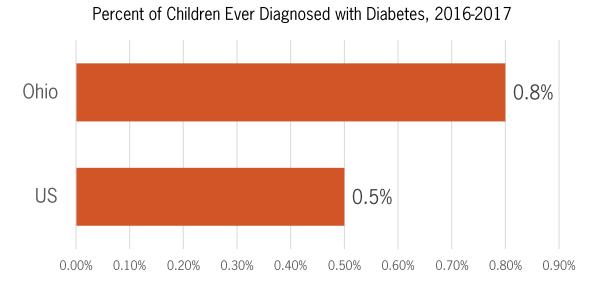
Child Obesity

Source: Ohio Medicaid Assessment Survey, 2017



Diabetes Prevalence, Children & Adults

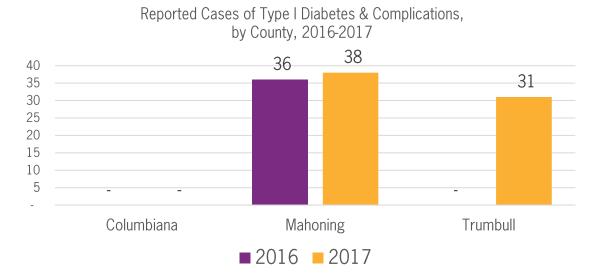
Sources: Child and Adolescent Health Measurement Initiative. 2016-2017 National Survey of Children's Health (NSCH); United States Diabetes Surveillance System, CDC



Diagnosed Diabetes, Total, Adults Aged 20+, Age-Adjusted Percentage, 2016 – Ohio 11.2% 11.5% 11.0% 10.3% 10.5% 9.9% 10.0% 9.7% 9.5% 9.0% 8.5% Columbiana Mahoning Trumbull

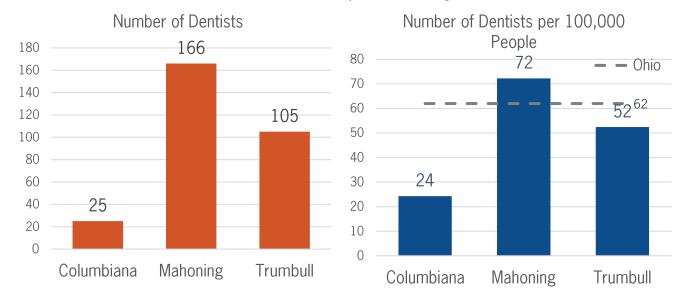
Type 1 Diabetes

Source: Ohio Hospital Association Data, Compiled by Akron Children's Hospital Note: Age Group- 0-18, Inpatient and Emergency Department. Only Includes OHA Member Hospitals, Data are suppressed where there are less than or equal to 25 cases.



Oral Health
Number of Dentists (Total Population)

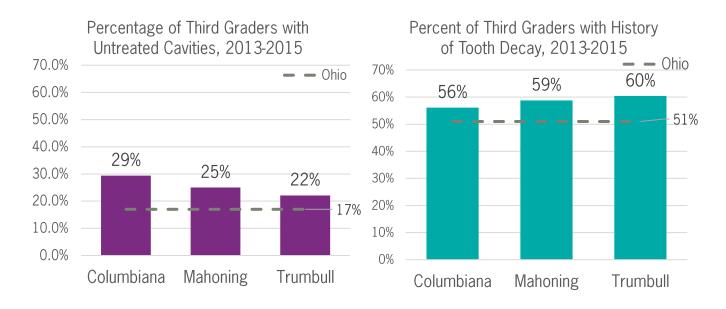
Source: Area Health Resource File, Accessed via County Health Rankings



Children with Dental Decay Issues

Source: Ohio Department of Health, "Make Your Smile Count! Third Grade Oral Health Screening Survey, 2013-15"

Notes: History of tooth decay means that a child had one or more untreated cavities, fillings, crowns, or one or more teeth extracted because of cavities. This data is from a survey and, in some cases, carries large margins of error. Differences should be interpreted with caution.



Physical Activity & Recreation

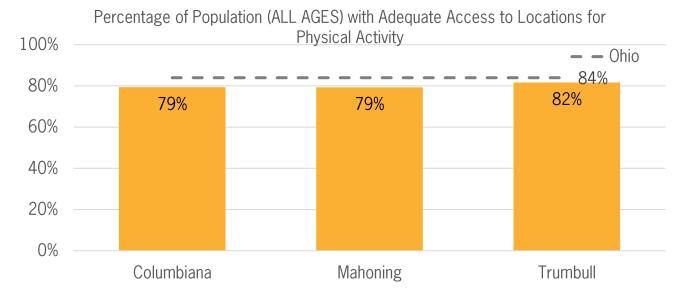
Child Physical Activity

Source: County-level estimates calculated by The Center for Community Solutions based on data from Child and Adolescent Health Measurement Initiative. 2016-2017 National Survey of Children's Health (NSCH)

3 Days or Less of Physical Activity In an Average Week, Ages 6-17 years, 2016-2017 — Ohio 44.9% 44.8% 44.8% 44.7% 44.6% 44.6% 44.5% 44.5% 44.4% 44.4% 44.3% 44.2% 44.1% Columbiana Trumbull Mahoning

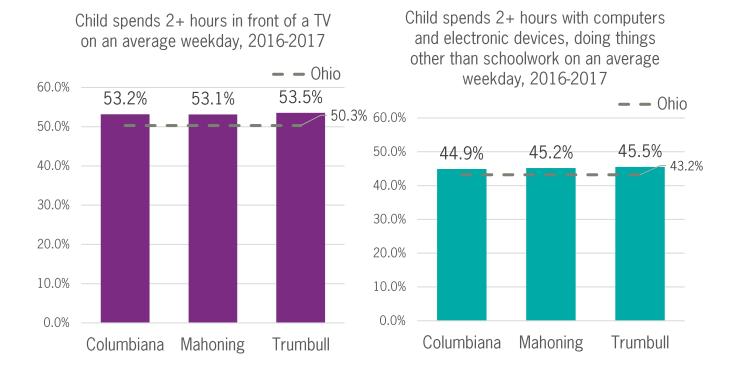
Access to Exercise Opportunities, Total Population

Source: Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files, Accessed via County Health Rankings



Child Screen Time

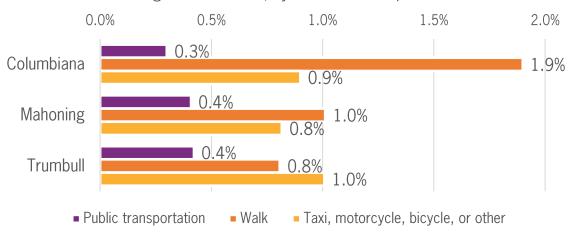
Source: County-level estimates calculated by The Center for Community Solutions based on data from Child and Adolescent Health Measurement Initiative. 2016-2017 National Survey of Children's Health (NSCH)



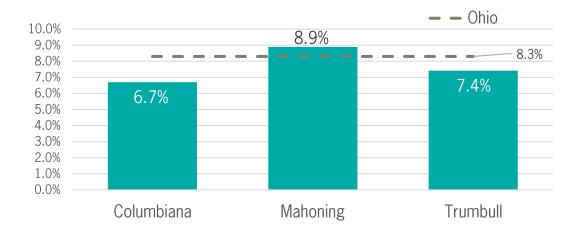
Transportation

Source: U.S. Census Bureau American Community Survey 2017 5-Year Estimates

Percent of Workers (Age 16+) Who Rely on a Method Other than Driving to Get to Work, by Means of Transportation



Percent of Households Without Access to a Vehicle, by County

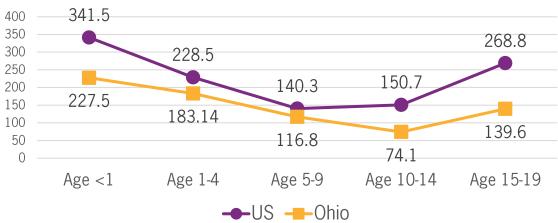


Unintentional Injuries

National and State Child Injury Rates

Source: Children's Safety Network, "2016 Fact Sheets" using 2012 State Inpatient Databases (SID), Healthcare Cost and Utilization Project (HCUP), Agency for Healthcare Research and Quality (AHRQ)

Rates (per 100,000) of Hospital-Admitted Injuries by Age Group, 2012

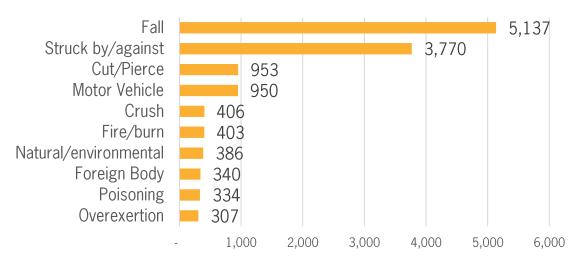


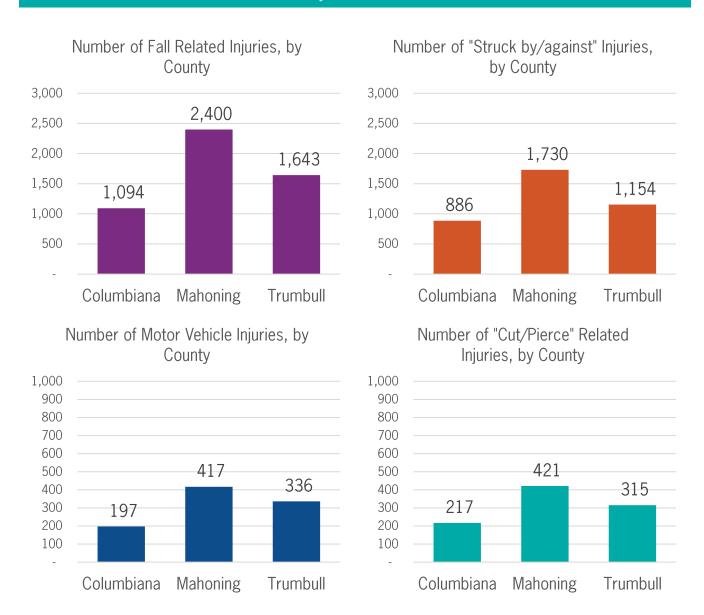
Injury Mechanisms

Source: Ohio Hospital Association Data, Compiled by Akron Children's Hospital, 2016

Note: Age Group- 0-18, Inpatient and Emergency Department, Only Includes OHA Member Hospitals

Number of Injuries in Region, by Top Ten Mechanisms of Injury





Appendix D: Focus Group Summary

Following best practices for community engagement, the assessment of children's health needs in the Mahoning Valley Region served by Akron Children's Hospital incorporated feedback from people most likely to be impacted by those health needs. Via facilitated discussions during focus groups, Akron Children's Hospital sought to work collaboratively with parents and caregivers to identify needs most important to residents.

Focus groups were facilitated by researchers from The Center for Community Solutions. Conversations were held at locations across the region, selected to be places where community members would feel comfortable. There was at least one focus group held in each of the seven counties in the region, in addition to conversations with targeted special populations. These included kinship caregivers, providers, and refugees. Food was provided and each participant received a \$30 gift card to thank them for their participation and compensate them for their time.

County	Location	Population	Attendees
Trumbull County	Trumbull WIC Office	Parents/Caregivers enrolled WIC	5
Columbiana County	Columbiana Job and Family Services Community Room	Parents/Caregivers	6
Mahoning County	Newport Library	Parents/Caregivers, Foster parents	12
		Mahoning Valley Region Total	23

Participants were assured that the feedback they shared would be kept confidential. Conversations were guided using a standardized set of questions. Community Solutions staff took detailed notes, which were compiled, analyzed, and grouped based on themes. This summary is included below. Focus groups participants also completed a questionnaire following the discussion. Results were compiled and analyzed in aggregate for the three-county region and can be found throughout this section.

Health Challenges

When residents of the Mahoning Valley tri-county region were asked about health challenges in their communities, they described both specific medical conditions as well as environmental and behavioral conditions. The medical conditions specifically mentioned by focus group participants included obesity, immunizations, food allergies, anxiety, depression, and substance abuse. Through conversation, participants identified a number of environmental and behavioral factors that contribute to some of the medical conditions.

When discussing obesity, residents from all three counties within the region identified access to healthy food as a challenge. Fruits and vegetables are known to be healthy food items but are also viewed as expensive. The groups quickly pointed out that less healthy, more processed options are cheaper and are guaranteed to be eaten by their children. One parent explained "worse food is cheaper than healthier food. It's easier to give kids potato chips than carrots. And kids like junk food". With limited budgets, parents and caregivers often make the choice of providing food they know their children will eat, regardless of its perceived healthfulness. Residents pointed out that junk food is in higher demand and that is what is stocked at smaller corner and convenience stores. Although not universally, many residents described living in food desserts

with little access to fresh and affordable foods. The prevalence, affordability and convenience of fast food was also identified as a factor in childhood obesity and general unhealthy behaviors among families.

Survey Results, Mahoning Valley Region Focus Groups

0% 10% 20% 30% 40% 50% 60% 70% 80% 90%100%

Are there places people can get healthy food in your community?

Do you have a large variety of fast food options near you?

Do people in your community struggle to afford food?

If you need to, would you know how to apply for food assistance programs?

75% 25%
79% 21%
90% 10%
95% 5%

■ Yes ■ No

In addition to lack of healthy food options for children, focus group participants also discussed a decrease in the amount of time children are spending engaged in physical activities. From conversation, three themes emerged related to lack of physical activity; screen time, safety and lack of opportunity. Many of the participants described children who prefer screen time to playing outdoors or with other children. Screen time includes personal technology devices, video games and television programs. Participants lamented that many parents do not seem to limit their children's access to screens or amount of time spent in front of them. Part of the reason screens have become more prevalent is a result of the reality that many parents and caregivers do not feel it is safe to allow their children to play outside. They expressed concerns about drug activity in local parks as well as unsafe equipment and lack of park maintenance. In more rural areas, wild animals are also a safety concern.

Lack of recreational opportunity manifests in a number of ways. In one focus group, it was explained that children no longer know how to play games together. They do not have older kids or parents teaching them how to throw a ball or organize a pick-up game of soccer or baseball. There are also fewer kids out playing available to be part of a pick-up game. The groups also talked about the expense of joining a recreation facility or a recreation league. While sliding scales exist, they are often unknown to the community or still too high. Transportation to and from organized activities can also be a barrier.

Behavioral health issues including anxiety, depression, substance abuse and the general description of emotional problems came up frequently during the focus groups held in Mahoning Valley. One of the groups included mothers who were currently or had recently been enrolled in the Women Infants and Children (WIC) income supplement program. The mothers in the group spoke about the need to feel comfortable enough with their medical provider to disclose opiate use and determine a plan for use during pregnancy. They also felt more education was needed to help pregnant women to understand the long term impact of smoking and substance use on their unborn children. They noted that when their peers use illicit substances or smoked and they do not observe visible birth defects in the babies, women have the false impression that the baby has had no ill effect from the use. They do not consider the longer term impact of unhealthy behaviors on the

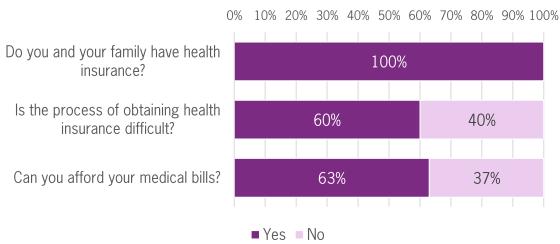
future development of the child. This group also expressed concerns about post-partum depression (PPD) and the need for better screening tools and more frequent screenings. The group mentioned that they are encouraged by medical professionals and social workers to share if they are having PPD symptoms but the mothers are concerned that they will risk losing their children if they identify themselves at risk of not being able to care for their child.

Groups in all three counties expressed concern about seeing depression, anxiety and emotional problems in children and a lack of services to address these issues. One of the groups was particularly concerned about seeing very young children, under age 5, having more serious and consistent behavioral and emotional issues. In some communities there are agencies that offer behavioral health services, however there are often barriers to accessing these services. The agency may not take the type of insurance a family has, copays can be high and there can be long wait lists to make an appointment. Residents in Mahoning County felt they had good access to inpatient crisis units nearby. Trumbull and Columbiana County residents were not able to identify reasonably close inpatient units for children experiencing a behavioral health crisis.

Missed Appointments

Focus group participants were asked why a family might miss an appointment for a child. Transportation was always the first answer to this question, however a number of additional issues were identified as well including work schedules, cost, forgetting, and lack of childcare. Considering transportation, many of the more rural communities do not have a public transportation option. If the parent or caregiver does not drive they rely on family or friends, use private transportation services or access a transportation benefit through their insurance company. In Trumbull and Columbiana counties, focus group participants described the transportation companies contracted through their Medicaid managed care plans as unreliable. Rides would be scheduled but no car would show up and at times people had been left at appointments without a ride home. The wait times on Medicaid contracted transportation also resulted in a 30 minute doctor appointment taking the entire day.

Survey Results, Mahoning Valley Region Focus Groups



Parents and caregivers talked about the challenges of having to take time off of work for appointments. Some employers do not offer paid time off and so a doctor's appointment can mean lost wages. This is particularly challenging if they appointment is located outside of their immediate community. Not having childcare for their other children was another issue frequently cited as a reason appointments may be missed. Juggling multiple responsibilities and health needs of multiple family members sometimes means people forget they have an appointment scheduled, so many find reminder phone calls very helpful.

Healthy Choices

When asked about what makes it hard to make healthy choices, responses included money, time, motivation, stress, mental health, lack of awareness, and a focus on basic needs. There was a general sense that parents and caregivers are stretched thin. Group participants discussed the reality of parents working multiple low paying jobs that do not always provide enough income to make healthy food choices, provide recreation opportunities and cover medical expenses. Parents and caregivers are juggling multiple responsibilities and may not have the time or energy to devote to preparing healthy meals or to transport a child to a sports activity. There was a sense that parents may not have the skills to prepare healthy food. If the parent or caregiver did not learn to cook at home or at school, they may only feel confident preparing highly processed foods.

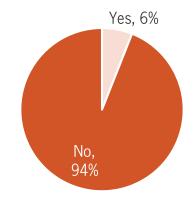
Housing

Access to safe and affordable housing was a concern of focus group participants in each of the three counties in the

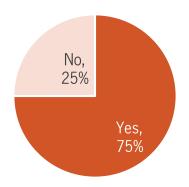
Mahoning Valley. Subsidized housing has long waiting lists in certain areas and homelessness is an issue to varying degrees in each county. According to focus group participants, Mahoning County has a 1 to 2 year wait list for public housing. Among the group, homelessness did not seem to be an issue but it was noted that people will double up with families while waiting for a space in public housing. In this county, residents experience with eviction is that it is a long process, up to six months, and does not necessarily prevent you from getting housing from another landlord.

Survey Results, Mahoning Valley Region Focus Groups

Are there enough jobs that pay a living wage or better in your community?

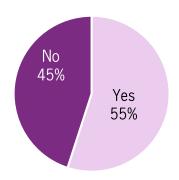


Is it hard to find a job in your community?



In Trumbull County, focus group participants described that some public housing units are easily obtained while others have longer waiting lists. The more desirable locations have longer waiting lists. The community is small enough that when evictions happen or utilities go unpaid, you may get a reputation and find it difficult to find housing. This can lead to homelessness. The Job and Family Services office in this community is able to assist with emergency housing in some eviction cases and may be able to assist in handling the eviction so that it does not go on a person's record. Utilities were also mentioned as an expense that cannot always be managed.

Survey Results, Mahoning Valley Region Focus Groups: Is there enough affordable housing in your community?



Columbiana County residents described the public housing waiting list as very long with the Section 8 list currently closed. While there are not many visibly homeless people in Columbiana County, there are a number of families who experience housing instability that involves frequent moves, couch-surfing and doubling up. If there is a threat of eviction, families will often leave before they can be formally evicted through the courts. There is a known landlord who posts notices when renters are just one day late in rent.

Schools

Residents of Columbiana County view the schools as a consistent partner in keeping children healthy. The Coordinated Action for School Health (CASH) plays a role in bringing health initiatives to schools, including mental health. Multiple schools in the district have food pantries and policies that everyone gets a lunch regardless of ability to pay or participation in the free and reduced lunch program. Community organizations offer supports through the schools as well. Recently a local donor paid a \$9,000 bill for students who were getting lunch without paying. Dental and visions screenings are provided and focus group participants expressed a desire to have depression screenings available at junior high and high schools. In Youngstown, the focus group participants were concerned that teachers and schools are increasingly expected to meet needs of their students beyond educational instruction. Students arrive at school with poor hygiene and hungry; before the child can be ready to learn their basic needs need to be addressed. Many in the group felt that parents were not engaged enough in their children's education and that the schools could play a role in building strengths and capacities within families so that parents could better care for the children and prepare them to be ready to learn.

In Trumbull County, the participants shared that the schools conduct vision and hearing screenings and dental checks. They also discussed the role schools play in identifying children who have been abused or neglected. The group saw teachers and schools as a resource in keeping children safe, if the teachers have been trained on how to look for signs of abuse/neglect and understand the proper channels to report and provide support for the child.

LGBTO

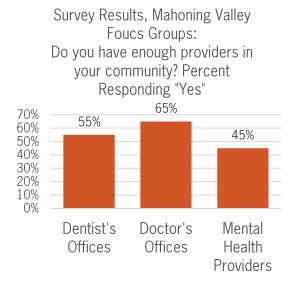
There was very little knowledge of resources for LGBTQ youth in the community in Mahoning County. People in the group suggested Cleveland or Akron might have something, but could not identify a place within their own communities that youth could find a safe place to be out or talk about their health needs. In Columbiana County, there was knowledge of a couple of local counselors who were very open to working with children in the LGBTQ community including children who were exploring their gender identity. In Trumbull County, one of the participants in the focus group is a member of the LGBTQ community and shared that a local librarian was someone she could be open with during her teenage years. The participant shared the importance of having safe spaces for LGBTQ children who are kicked out of their homes and lack family support. Both mental and physical health can suffer without familial support.

Trust

Participants of focus groups shared what would be present in a person or agency that would allow them to develop trust with that entity. They described having time to develop a good rapport, being listened to, being respected and an acknowledgement of their history and knowledge. More than a specific agency, participants often listed people they had developed relationships at agencies and therefore trusted to seek assistance from them if necessary. More generally, people said they trusted faith based organizations, social service agencies, pediatricians, mental health professionals and schools.

Needs from Hospital System

Focus group participants were asked what a hospital system could do to improve the health of the community and to make their community a better place to live. Responses included opportunities related to medical care as well as ways for a hospital system to be more involved in the community. On the medical side, residents would like to see more accessible preventative care, possibly through mobile services and clinics at schools, faith based organizations, and community action agencies. They would also like to have walk-in clinics and Urgent Care facilities within each of their communities. The group sees a need for more specialists outside of the main hospital buildings, including mental health, ENT, cardiologists and neurologists. Residents would like to see more support for post-partum mothers, support groups and medical professionals who invest in strong communication and relationship building with their patients.



Outside of direct medical care, focus group participants would be interested in hospital systems offering health fairs, linking patients to community based services, providing support in schools and offering programs for kids with special needs (autism/sensory disorders). Participants believe the need for recreational opportunities could be an area a hospital system could be impactful by offering sports league sponsorships, promoting swim skills, and offering general health education on the benefits of regular physical activity.

Although transportation and housing are great needs within the Mahoning Valley, focus group participants did not identify these issues as ones for a hospital system to address. While the groups recognized that lack of either transportation or housing can have negative impacts on healthy, it did not appear they view either as a health issue.

Largely, the community has a positive view of Akron Children's Hospital. In each focus group, at least one participant shared a positive story about receiving care through the hospital system. Akron Children's is viewed as a valuable organization in the community and one that has brought resources and employment to communities where they have a physical location.

Appendix E: Key Informant Interview Summary

As part of the assessment process, The Center for Community Solutions conducted a series of key informant interviews with a broad array of community leaders. The interviews focused on health initiatives that had been successful and those that had not, factors that impact children's health, and the role of Akron Children's in addressing community issues. Interviewees were promised that their feedback would be kept confidential. Community Solutions' researchers took detailed notes, which were compiled and analyzed to identify common themes. They are summarized and presented in alphabetical order, below. Full interview notes are available upon request.¹

Columbiana County

Columbiana County Educational Service Center: Anna Marie Vaughn

Columbiana County Health Department: Wesley Vins Columbiana Family and Children's First Council: Lori Colian

Salem Regional Medical Center: Dr. Anita Hackstedde

Mahoning County

City of Youngstown: DeMaine Kitchen

Community Foundation of the Mahoning Valley: Sarah Lowry Juvenile Court Division Mahoning: Judge Theresa Dellick

Mahoning County Children Services: Randall Muth

Mahoning County Mental Health & Recovery Board: Duane Piccirilli

Mercy Health - Youngstown Region: Dr. James Kravec

United Way of Youngstown and the Mahoning Valley: Bob Hannon

Youngstown City Health District: Erin Bishop

Youngstown Neighborhood Development Corporation: Ian Beniston

Trumbull County

City of Warren: Mayor William Franklin

Trumbull County Board of Developmental Disabilities (Fairhaven): Nancy Miracle

Trumbull County Children Services: Timothy Schaffner

Trumbull County Health Department: Frank Migliozzi & Jenna Amerine Trumbull County Mental Health & Recovery Board: Laura Domitrovich

Access to Medical Providers

- Leaders would like to see more specialty services offered throughout the region.
- Travel times for health and dental care can be a barrier to services.
- Efforts to increase the use of mobile clinics would be welcome.
- In general, leaders in the region appreciate that services are brought closer to residents via Akron Children's Hospital Pediatric offices.

¹ To request the full interview notes, please contact Lauren Trohman, Akron Children's Hospital, One Perkins Square, Akron, Ohio 44308, Phone: (330) 543-0737, Email: Itrohman@akronchildrens.org

Many of those interviewed expressed a method for improving children's health would be to connect all family members to a primary care physician and regularly visiting the physician. Additionally, ensuring children receive vaccinations and have continuous access to the entire health care system would improve the health outcomes of children. Multiple community leaders praised the opening of Akron Children's Hospital Pediatrics (ACHP) offices. In addition to pediatricians, those clinics house specialists adding valuable resources to the community. Transportation and the ability to travel to Akron is a challenge for residents of the region. ACHPs have decreased the transportation barrier and increased access to health care for many families in the area.

Leaders in Mahoning County shared that making primary care accessible to all has been a good community-wide initiative. The initiative worked because health systems, boards of health, and other groups worked together and have a funding source through grants. However, there is some concern amongst leaders that upper middle class families go to ACH because it's "the best in town", and wondered if kids in poverty have the same access to Akron Children's top services. In reality, Akron Children's serves many low-income families and those who rely on Medicaid for their health coverage.

Interviewees recognized Akron Children's considers public transit routes when locating offices. The facility improved access to care for those who rely on or choose to use public transportation. The ACHP facility is ready to serve all children, especially the underserved community. Interviewees explained ACHP appears to be poised to increase utilization by the community.

Adverse Childhood Experiences & Childhood Trauma

- High levels of drug use is leading to neglect of children.
- Children's services are taking in children younger with higher levels of care needed and for longer periods of time.
- Initiatives addressing trauma should include raising awareness, establishment of protective factors, early interventions, and programs on cultivating resiliency.

Across all three counties, the topic of trauma was mentioned and indicated as a crucial factor keeping children from being healthier. Many key informants highlighted the negative impact of trauma on both physical and mental health over the life course. It was suggested that all hospital systems should routinely screen for trauma and offer services and resources for those who have experienced trauma. One key informant highlighted that symptoms of trauma are being diagnosed as ADHD in some cases given the criterion for the diagnoses are similar to expressions of trauma. A need for education and prevention measures for families was highlighted.

The increase of adult opiate use in the region was identified as a factor increasing the prevalence of trauma in children. Key informants made note that children under age six are experiencing trauma at high rates in the form of exposure and neglect related to parental drug and alcohol use.

Interviewees from all three counties identified the need for Trauma Informed Care throughout the community. One individual mentioned a partnership between the Ohio Department of Mental Health, Akron Children's, and the Mental Health and Recovery Board to improve Trauma Informed Care. While this is seen as a good start, many felt more continued and increased efforts are needed.

Asthma & Respiratory Care

One leader from Trumbull County noted that the high rates of childhood asthma required a continued focus.

Behavioral Health

- Parents and caregivers appear uncomfortable in addressing children's mental health needs.
- The demand for mental health services exceeds the availability for children in Mahoning Valley region.
- Workforce development is needed for mental health professionals.
- Behavior problems and suicide are being seen in younger children.

Community leaders expressed that individuals in the community struggle to think about their own mental health and sometimes hesitate to address their children's mental health needs. Initiatives in the Mahoning Valley to educate parents about their children's mental health have fallen flat and some attribute this to a lingering stigma around the issue. Parents do not want to attend educational events about mental health for fear of others thinking their children have "issues".

Numerous key informants from all counties noted that there are not enough mental health service providers to meet the demand of both children and families. Some challenged Akron Children's to expand both inpatient and outpatient pediatric behavioral health services. One key informant suggested offering behavioral health services through a mobile clinic and within the schools. Some initiatives are finding it challenging to find providers who are adequately trained. Workforce development in the behavioral health field including social workers, therapists and child psychiatrists is a need within the Mahoning Valley region.

A few key informants indicated that behavior problems including aggressiveness, depression and anxiety are showing in younger children. Notably, suicidality is also on the rise and in younger children. Some point to social media and online bullying as a contributor to the increase.

Behavioral Health Providers

- Providers in region report not being able to offer the same level of care for mental health services as can be offered in Akron and travel for some families is not viable.
- The need for an inpatient facility in Mahoning County for behavioral health was identified.
- Behavioral health professionals embedded into in ACHP offices has been successful.

While the presence of pediatricians and some specialists in the Mahoning Valley region is recognized and appreciated, multiple community leaders identified a lack of Akron Children's behavioral health services in the community as a challenge. Traveling to Akron for behavioral health care is not seen as a viable and sustainable option for people in the region. When considering visiting behavioral health providers, a common concern is that "they only come on certain days." One leader mentioned that Akron Children's is the only behavioral health service provider available and there is a divided line; "we don't get all the care that is available in Akron".

In Mahoning County in particular, available behavioral health providers and facilities do not fully meet needs. As a result, some families go across the border to Pennsylvania to receive services. Inpatient treatment is the last option and when it is needed to stabilize a child's mental health, it's important for the community to have access to this service. Leaders would also like to see improved continuity of care between behavioral health agencies and less competition between agencies.

One success in the area of behavioral health access involved a partnership between Akron Children's and pediatrician's offices to have behavioral health counselors located within the doctor's offices. Many would like to see this program expanded.

Birth Outcomes

- There is a shifting focus from safe sleep to preventing prematurity.
- Lack of birthing hospitals within the community presents a barrier to prenatal care.

According to those interviewed for the assessment, issues related to birth vary by county. In Trumbull County, efforts to prevent infant mortality are shifting from safe sleep to preventing prematurity. Areas of focus are likely to include birth spacing, maternal obesity and maternal smoking. Columbiana County leaders identified the lack of a birthing hospital as a barrier to health including access to prenatal care. The last birthing unit in Columbiana County closed about six months ago resulting in longer travel times to deliver babies and an exodus of OB-GYN practices. Mahoning County leaders described precarious funding, and example of which was the end of a Medicaid grant which provided transportation for women during and after pregnancy for medical appointments and other essential travel. The program is challenged with trying to figure out how to continue that transportation benefit without the funding they previously had.

Caregiver Substance Use

- Substance Use Disorders (SUD) of parent/caregiver impact the entire family.
- Individuals across the spectrum of SUD struggle to provide basic needs for children.
- Children experience parental loss, neglect, family and housing instability, placements into foster care.

The key informant interview process highlighted the impact on the entire family when a parent or caregiver has a substance use disorder (SUD). Many of those interviewed specifically mentioned addiction to opiates and the impact that has had on children. Opiate use has increased dramatically in many counties in the adult population. To many, there is a clear indication that parental substance use affects children. Parents working towards recovery, actively using and incarcerated all struggle to provide for the basic needs of the children in their care. The impact on children is evident through the trauma of parental loss, neglect, living with other family caregivers, and placements through child welfare. One of the interviewees explained that from their perspective, nobody knows how to treat the truly dual diagnosed parent – seriously addicted and serious mental health issue. In the past, families have been able to count on grandparents to provide care, but now sometimes grandparents are also dealing with their own addiction. Many expressed that even after deaths reduce, we are still going to be seeing the aftermath for a long time.

While opiate addiction was identified as an issue impacting the health of children through key informant interviews, those interviewed also identified a number of solutions that communities have had attempted with varying levels of success.

A number of leaders feel that the fight against opioids has had success. It is an issue that affects the whole family and it has brought the community together to work on this issue. Leaders in the region mentioned being able to use data and having the flexibility to adjust the strategy based on that data which has been a real strength of some initiatives.

Crime

- Some communities prioritize prevention and early intervention in relation to juvenile crime.
- Early identification and intervention can reduce the long-term negative impact of crime.

One leader noted that there has been a decrease in juvenile crime and credits an intentional switch to prevention and early intervention efforts with a concentration on elementary schools. The court recognizes that the more the children are in court, the more they begin to believe they are "bad kids." Leaders in this field explained there are true health and behavioral health benefits to identifying a need and provide services to children as early as possible. This helps build resiliency skills for people in traumatic situations, such as witnessing or experiencing violence.

Multiple interviewees brought up the physical environment in relationship to criminal activity in the community. Housing vacancy was identified as an environmental element that attracts crime. There is a feeling that increased community gathering and green spaces would reduce crime and increase the perception of safety.

Employment

- Better paying jobs are not seen as accessible because they either are often not on public transport routes or they require specialized training or degrees.
- The Lordstown plant closure will contribute to unemployment and economic loss with in the community.

Interviewees report seeing both population decline and job loss in the region. More and better paying jobs would help parents become fully employed and that would contribute positively to the health of children. Families are struggling; one example given was of a mom who quit her job to take care of a child with special needs. However, better paying jobs are not seen as accessible because of transportation and credential requirements. During the period when interviews were conducted, the General Motors Lordstown plant closed. It represented both the loss of jobs and contributions to charity programs. Other leaders pointed out that hospital systems are often the largest employer in a community and can be the leaders who develop workforce development programs.

Foster Care

- Systems tasked with providing safe and healthy environments for children who are not being cared for by parents are overwhelmed.
- The region is experiencing a lack of foster parents compared to need.
- Children's services have increasingly developed the practice of placing children with kin.

The systems in place to provide safe and healthy environments for children are overwhelmed in the Mahoning Valley region. In Trumbull County, children taken into custody went up 40% between 2013 and 2015 which leaders saw as directly related to opiates. Children's services have increasingly developed the practice of placing children with kin as the need for foster parents is greater than those willing to foster a child. One leader noted that available foster parents live in rural communities and those who need foster parents are in more urban areas.

Health Education & School Based Services

- Leaders across the region identified schools as a touchpoint for promoting and delivering services.
- Obtaining consent from parents would be a crucial feature of a health service offered.
- Fundamentally changing the model of care delivery to increase school based health services could be a game changer in improving the health of children.
- Multiple opportunities were identified for an outside health system to become involved in schools through medication assists and providing training for children with special health needs.
- Many districts appear to be open to contracting with health systems to bring in nursing and behavioral health services.
- Health programming, including sexual health education, is a need within school systems that a medical organization could provide.
- Many schools desire nutrition services and education for students and their families.

Leaders within the Mahoning Valley region, including those within the educational system, indicated a desire for school based health services provided by an outside entity, such as Akron Children's Hospital. One leader noted that children are at school because they are mandated to be. Schools have high access to children. If the child will not get to a provider during their hours spent at home, the school could be positioned to get the provider to them during the school day. Needs and delivery method preferences vary by district and sometimes school. Efforts to provide school based services should be designed with the unique needs of the school in mind as opposed to a standardized model.

Some leaders would like to see hospitals work with teachers and principals on basic hygiene and health issues that can impact learning and also have an attainable solution. For instance, working with children that can't see the board to get glasses, providing kids with an aching tooth dental care, determining which children may be food insecure and providing food and nutrition services. Leaders felt these types of health needs are especially an issue in grades K-4 if they don't have a supportive parent at home. These types of health interventions would address the need for health services in the school that go beyond traditional medical services.

Interviewees identified the need for behavioral health services offered within the school during the school day, but one barrier is the lack of professionals who are able to provide these services as well as the available funding sources. Some schools have been able to bring counselors into the schools, but more are needed. Schools in the region have used the PAX Good Behavior Game as an evidence-based tool to promote self-regulation and self-control for young children. This appears to be a successful intervention for the students in the early grades who have been exhibiting more aggressive behavior. Leaders also identified a need for more crisis teams at schools for staff to provide them with resources when a crisis occurs.

Leaders of community organizations would like to see outside organizations welcomed into schools to conduct assessments or to provide information on topics like vaping and other controlled substances. Currently in some districts, there is a perception from the administration of the schools that if you let outside educators come, you are admitting there is a problem. However, in other districts interviewees noted that an apparent benefit of the opioid crisis has been schools that are more open to professionals coming in and doing drug education.

Health Equity & Race

Hospitals can elevate local discussion of race and equity.

At the community level, hospital systems can elevate local discussions of race and equity which is at the root of many both long established and emerging issues in the region. Leaders would like to see Akron Children's ensuring their own teams are participating in trainings or programs where they can develop better understanding of issues related to race, racial bias, and racial equity. Opportunities for trainings should be available to the full spectrum of employees within the hospital system. A leader in Mahoning County noted the influx of the Hispanic or Latino people, which presents barriers not only in language, but in trust of service providers.

Health Insurance Access

- Administrative requirements make maintaining Medicaid coverage challenging for many families.
- Private insurance plans often have high copays and deductibles resulting in health care still being unaffordable for the insured.

Professionals in the Mahoning Valley region characterized the segment of the population they work with as reluctant to accept help through publically funded programs like Medicaid, noting that pride keeps children from being healthier. In addition to parents' reluctance to enroll in public assistance health insurance programs, maintaining coverage is made harder by administrative burdens such as re-determination appointments, needing to re-enroll in Medicaid after an employment change and other state imposed requirements.

A leader in Mahoning County described health insurance enrollment efforts as not successful. After the Affordable Care Act was passed, there was a push to enroll people in Medicaid and through the marketplace that was moderately successful, however with changes in the political climate people are back to asking "what do we do?" Some felt that hospitals could advocate for new legislation to enhance services covered by Medicaid or private health insurance, specifically related to early intervention and prevention.

There is a desire by many in the community to see health care become more affordable. There is a balance between affordability and quality. While there is a general understanding a hospital has be financially stable in order to operate, affordability matters and many informants believe there should be a focus on providing care for as many people as possible. There was acknowledgement and appreciation of Akron Children's policy to have copay-free well visits. This policy allows families to attend preventative care appointments and perhaps could be better promoted within the community at large.

Housing & Eviction

- Housing is a major health barrier for children in the Mahoning Valley region.
- Unhealthy conditions include filth, hoarding, mold, leaky roofs and lead paint.
- Housing vacancy is an issue across the region.
- Youth aged 18-26 are particularly challenged with finding stable, affordable housing.

Community leaders interviewed for this assessment see a need to build up the existing environment to make it safer and better. To start, improvements should be made the physical environment followed by policy and

system improvements. The built environment is a barrier to healthier children in the Mahoning Valley in a number of ways, including the state of the housing stock. Many of the houses were built before 1972 and therefore likely have lead paint. There is a Healthy Homes Healthy Families initiative that has started working on this issue but more is needed; more screening, abatement and federal funding. Housing vacancy is also an issue. The actual physical structures present a danger to children as they fall apart, but the structures also attract crime. Leaders want to be thinking about how the community can promote greening and reuse.

In Youngstown there are many children who live in very low quality rental housing and are exposed to lead, mold, low quality housing that causes health issues. While many homes have been renovated, there are still many that create unhealthy living conditions for children. In addition to housing, neighborhood conditions overall are seen as an issue to children's health. One leader suggested that all new housing and commercial developments should have to conduct a health impact assessment to determine how the development impacts all constituents.

Income & Poverty

- Poverty is a barrier to health.
- The entire region has experienced economic struggles and lost population.
- Jobs with livable wages are not widely available.
- Social determinants of health have overwhelmed the region.

There is nearly universal agreement among those interviewed in the Mahoning Valley region for this assessment that poverty is a barrier to health. Challenges related to the social determinants of health were often mentioned as being so prevalent that they are nearly impossible to fully address. Community members do not have access to education they need, healthy foods at an affordable price, and have increased stress related to poverty. All these issues tie into reasons why residents are not engaged in their health or prioritizing healthy choices. One interviewee noted that socioeconomic factors are a challenge; they are complex and very embedded. There is high unemployment, low educational attainment, and low income. When a family struggles, it hurts the health of the children. While programs may be available to address some of these needs, some residents have the perception that "I'm not a poor person" and the assistance is there for someone else. Although poverty in the region is often associated with urban and rural populations, changes in some suburban areas were seen as an indication that families in poverty are moving into the suburbs as well.

Poverty in the region is associated with both job loss and population decline. As a result of population decline and people migrating outside of the urban core, the infrastructure of the urban centers no longer meets the needs of the population. Services and people are farther apart than in years when employment was plentiful and the population was on the rise. Jobs with livable wage are not widely available in the region for those who do not possess advanced degrees. Community leaders would like to see more coordinated efforts between training programs and employers so people are accessing training on the skills employers need.

Infant Mortality

- Aspects of infant mortality initiatives were identified by community leaders as both successes and failures.
- Strong collaboration and goodwill across sectors sets groundwork for success.
- Effective grassroots messaging in communities can expand reach.
- Pregnant women often do not value or understand need for prenatal care.

Community leaders interviewed for the assessment were asked to identify health initiatives that had been both successful and not successful in their communities. Infant mortality came up often as examples in both categories of success. The MY Baby's First infant mortality coalition in Mahoning County is viewed as successful. Centering pregnancies initiatives have also been held up as an example of success in reducing infant mortality. The achievements of these initiatives are attributed in part to strong collaboration among community leaders across sectors. Successful initiatives have involved health systems, boards of health, and other groups working together and also having a funding source through grants. A contributing factor of the MY Baby's First success has been a division into subcommittees with focused attention on safe sleep, birth spacing, and breast feeding, among other topics related to infant and maternal health.

Leaders in Trumbull County also identified infant mortality health initiative as successful, citing the decrease in the number of infant deaths as a measurement of success. This initiative succeeded in part because of the strong collaboration between community members and goodwill amongst members. While some see success in infant mortality, others identified areas of weakness and a need for further investment of community resources. In Columbiana County there is a concern that the community is not interested in learning about infant and maternal health and healthy infant sleep practices, or they understand its importance. Raising awareness through effective grassroots community messaging could help address these issues.

While leaders in Trumbull County praised the Akron Children's safe sleep project as a very important health promotion activity, some felt the overall infant mortality initiative has not been successful. They explained that "as a community we haven't gotten our hands around it." Although there is no single identifiable reason for a lack of success from efforts related to infant mortality reduction, there is a concern that the initiatives are not engaging moms effectively. Other reasons for lack of success in reducing infant mortality rates include pregnant women not valuing prenatal visits or understanding the need for these types of visits and lack of access to birthing hospitals, pregnancy centers and prenatal care through OB-GYN practices.

Nutrition & Food Access

- Food deserts exist in both rural and urban areas of the region.
- Nutrition is not a top priority for parents living in poverty.

There was a consensus among key informants that access to healthy foods and education about nutrition are key drivers in child health. In both rural and urban areas within the Mahoning Valley, key informants pointed to the existence of food deserts. There is recognition that when parents are living in poverty, nutrition is not a priority, and this has long term consequences related to health outcomes, including obesity and diabetes. Several people mentioned the importance of school lunches, with some saying they are important sources of nutrition for poor children, and others saying kids don't eat the healthier lunch options.

Obesity & Diabetes

Few community leaders interviewed for this assessment mentioned childhood obesity as a health condition they are concerned about. Those who brought up the topic did so in the context of lack of fitness and educational opportunities in the school, high poverty and finding ways to focus on solutions to the issue.

Oral Health

- Mobile clinics that provide dental health care are desired by the community.
- There is a lack of oral health professionals offering their services within some areas of the Mahoning Valley region.

Mobile clinics are seen by many community leaders as a way to improve access to dental and health care for areas of the region that do not have permanent health or dental clinics. As one interviewee explained, it can take forty minutes each way to visit a health care facility. If the clinic can come closer to the people it would provide more access by bringing hospital services to the community. Some of those interviewed in the Mahoning Valley region mentioned the lack of access due to lack of professionals offering their services, including dental, orthopedic and neurology services. One interviewee suggested having providers visit the more rural areas of the region one day per month or quarter in communities where people have trouble accessing care in Akron or Youngstown.

Physical Activity & Screen Time

- Poverty prevents people from accessing recreational opportunities.
- Akron Children's could structure community outreach efforts to promote physical activity.
- Parents/caregivers need assistance accessing organized recreational activities (cost, transportation).
- Improvements to built environment (parks, playgrounds, sidewalks, streets, bike paths) would reduce barriers to no-cost physical activity.

Many interviewees agreed that increased activity and recreation would be useful in improving the health of children living in the Mahoning Valley region. There is a general sense of concern around the increased use of screens and decreased outside play time. There is a feeling that kids exercise in schools, but not at home. However it was also mentioned that in some schools, a reduction of recess prevents kids from being healthier. Some noted that there are lots of opportunities to get exercise, however poverty prevents people from accessing opportunities. It was mentioned that Akron Children's used to have a physical fitness program in the schools and it would be welcomed back. The community would like to see Akron Children's community outreach activities encourage physical activity. One interviewee explained that engaging children with special needs in physical activity involves additional barriers and challenges. Another noted a challenge to increasing children's physical activity is the parent or caregiver's ability to provide access to organized activities for their children.

A common theme among those interviewed was the desire to increase space within the built environment for the community to engage in regular physical activity. Some felt resources to make these types of improvements are available but not currently allocated in a way that actually increases access to local parks and wellness activities. Improvements to city parks, which in some areas of the region are overgrown, broken, and have high crime, were often mention as ways to increase youth activity. Major cities could adopt a program in which equipment would be well maintained, well-lit, with age appropriate programming that draws families in. Poor street design was also mentioned as a barrier to physical activity. The crosswalks

near schools and signage do not promote safety and so children and families do not walk to school. The entire community could adopt some of the Safe Routes to School practices. Children observing the adult community members also biking and walking to get to their locations through the same routes could increase their interest in using those routes.

Although lack of access to physical activity opportunities was mentioned by many leaders in the Mahoning Valley region, many interviewed for this assessment were able to identify areas where health initiatives to engage youth in physical activity have seen success. Attention to detail, a passion to help people, having good goals and objectives, and good communication contribute to making initiatives like this successful. Another successful initiative brings exercise classes to community centers. The programs continue to grow and the participants are diverse in age and ethnicity. There is also a nutritionist who comes to the program with food samples and recipes. The success has been attributed to organizers being committed to taking the program to where the people are and connecting them to what they already feel comfortable doing. Activities through the YMCA have also been successful particularly through sports leagues.

Transportation

- Overwhelmingly, community leaders identify transportation as a barrier to children's health.
- Public transit routes run through the most populated areas as well as business districts but few other
 areas. Residents of rural areas of the region have very few transportation options if they do not have a
 car or drive.
- Social service agencies have transportation programs, but they are limited.
- People living in poverty who do not have access to public or subsidized transportation do not have many options.

Nearly all of the interviewees in the Mahoning Valley region touched on the challenges of transportation within their communities. Public transportation reaches some, but not most areas of the community. Public transit routes run through the most populated areas as well as business districts but few other areas, leaving residents of rural areas with few options. There are some transportation programs funded and/or administered by social service agencies in the area that assist with transportation for medical appointments. While these transportation programs are viewed as very important, leaders also noted community members lack awareness of their existence. Some leaders would like to see hospital systems invest resources in areas related to social determinants including transportation. Hospital systems are seen as community anchors that could play a leadership role in coalitions or groups attempting to push forward policy change. Safe Routes to School in Mahoning County was pointed out was an initiative that improved transportation for pedestrians and cyclists within the community. Through this program infrastructure improvements including crosswalks and signage have been implemented. Many would like to see Safe Routes to School expanded throughout the regions as well as Complete Streets initiatives.

Youth Substance Use

- Surveys indicate a much higher rate of students using/abusing drugs and alcohol than seeking treatment.
- Casual acceptance of marijuana use increases the challenge of drug prevention education in schools.
- Most discussion of substance use focused on parents and caregivers rather than youth themselves using drugs.

There is a concern among leaders within the Mahoning Valley region about the casual acceptance of marijuana use paired with the challenge of bringing drug prevention education into the schools will lead to increased use of substances. However, one interviewee noted that a benefit of increased opiate use in the community has been that schools seem more open to professionals coming in and providing drug education. There is a sense in the community that everyone knows someone who has been impacted by the opioid crisis and so the stigma has actually reduced, it's recognized as a serious problem and one that prevention efforts in the schools can have an impact. Leaders explained that recently there has been an increased presence in the school along with more education for educators on how substance abuse disorder of parents and caregivers impacts children. Schools with high rates of parent overdose have been prioritized to receive these interventions.

Appendix F: Progress Since Last Assessment

Asthma

Global Aim: Reduce the burden of asthma for our patients, their families, and our community Specific Aims:

- Between 1/1/17 and 12/31/19, reduce hospitalizations for the asthma registry population at Akron Children's Hospital from 2.3% to 1.8 % and reduce emergency department (ED) visits for asthma from 5.8% to 4.5%.
- Between 1/1/17 and 12/31/19, improve the individual and bundled components of **Optimal Care** for the registry population as follows: ATP from 63% to 90%, ACT from 36% to 90%, flu vaccine from 35% to 60%, and the bundled measure from 14% to 50%.
- Between 1/1/17 and 12/31/19, meet or exceed all **HEDIS measures** related to asthma embedded in value based contracts for the system.

embedded in value based contracts for the system.		
Objectives	Outcomes	
Improve asthma identification and risk stratification	 EZ Breathing asthma screening and education program deployed to all Akron Children's Hospital primary care practices, with more than 84,000 patients screened and 2800 new asthma patients diagnosed An estimated 400 emergency department visits prevented in 2018 among asthma registry patients 	
Practice guideline-based care throughout the system	 Implemented standardized discharge process via Asthma Treatment Plan (ATP). As of March 2019, over 15,000 patients had ATP updated within past year. 59% updated within the past year in primary care 94% updated at time of hospital discharge 80% updated at emergency department visit 	
Mobilize an Asthma Care Management Team (ACMT)	 Only one patient seen by ACMT was readmitted within 30 days of discharge in 2018 70,000 patients underwent new Social Determinants of Health Risk Screening in 2018 	
Expand Home Health Services and leverage community partnerships to improve the living environment for children with asthma	 All Home Health nurses trained in Healthy Homes Collaborated with Summit County Public Health to implement 'Managing Asthma Triggers at Home' Program, serving high risk asthma patients living in Summit, Portage and Medina Counties 	
Improve asthma care in the school setting	 Open Airways education for students and teachers Launched school asthma programs targeting high risk schools in Akron and Youngstown 	
Increase patient and family empowerment	Educational programs standardized and available in a variety of settings, including YouTube videos	

Behavioral Health			
Global Aim: Expand a collaborative model of behavioral health services in our hospital-based pediatric			
offices Specific Aim: Collaborate with Division resources and/or local mental health agencies to integrate			
behavioral health services in Akron Children's Hospital Pediatrics (ACHP) offices			
Objectives	Outcomes		
Increase access to behavioral health services to all ACHP locations within the region from current baseline	 Increased primary care locations with behavioral health services provided by Akron Children's Hospital from 1 to 10, and increased locations with services provided by community agency from 5 to 12. Two additional sites have both Akron Children's and a community agency colocated in practice. Although the number has fluctuated due to staff turnover and a community agency closure, as of summer 2019, 24 of 29 ACHP sites have integrated behavioral health services. Added 15 days of staff coverage to ACHP sites. 		
Increase number of patient visits throughout the ACHP locations	 Patient visits increased more than 180% percent from 2016 to 2019 YTD, from 1210 to 3392. Added third telepsychiatry site in Ashland ACHP and credentialed one new staff in telepsychiatry. 		
Additional Activities	Outcomes		
In addition to the objectives above, the behavioral health implementation team collaborated with local agencies on a variety of community engagement efforts	 Established memoranda of understanding with 9 community mental health provider agencies Partnered on crisis response/care coordination and trauma informed care efforts in Summit, Mahoning and Stark counties Developed speakers bureau and provided 124 community presentations on topics ranging from suicide, gun violence, autism, diabetes and trauma informed care 		

Injury Reduction		
Global Aim: Reduce preventable injuries and their impact in our communities		
Objectives	Outcomes	
Consolidate injury data sources to a common data management program	 Merged six fragmented trauma and injury data sources via Tableau platform Launched new electronic medical record module for standardizing collection and analysis of data for patients presenting in emergency department with injuries 	
Define the epidemiology of pediatric injury through data and research	Timely Recognition of Abusive Injuries (TRAIN) Collaborative protocols rolled out to emergency department and primary care practices, leading to 50% increase in identification of sentinel injuries among infants 6 months and younger	

Diabetes		
Global Aim: Improve health outcomes and quality of life for patients with type 1 diabetes by teaching them and their families how to self-manage and ultimately, live with the disease		
Objectives	Outcomes	
Improve diabetes education at the time of initial diagnosis	 Assessed nurse education needs and used results to standardize onboarding and annual RN education specific to type 1 diabetes care Developed patient education and satisfaction assessment tools 	
Improve quality of life for patients with type 1 diabetes and reduce the cost of care	 Of the 215 students served by Akron Children's Hospital Endocrinology, 90% had diabetes management plans on first day of school (2018) Piloted diabetes support group for high school students in supportive district; low participation drove shift in direction toward telehealth-focused interventions 	
Empower patients with type 1 diabetes to transition successfully to adulthood	With input of Diabetes Parent Advisory Council, developed readiness assessment and transition pathway with branded, standardized education modules for patients and caregivers	

Infant Mortality

Global Aim: Reduce Mahoning County Infant Mortality rate by 20% from 11/1000 in 2015 to 8.7/1000 in 2019

Specific Aims:

- Reduce overall infant mortality rates for Mahoning County from 10.9/1000 in 2015 towards the Healthy People 2020 goal of 4.8/1000 live births
- Reduce prematurity birth rate for Mahoning County \leq 37 weeks from 13% in 2015 towards the Healthy People 2020 goal of 8.1% of live births

Objectives	Outcomes
Between 1/1/2017 and 12/31/2019 reduce sleep related deaths in Mahoning Valley	 Secured grant funding to provide community education and more than 2,500 safe sleep kits for newborns in Mahoning Valley community birth hospitals and programs Educated more than 3,600 non-health care providers (including day care center staff) through safe sleep activities and programs Mahoning County showed 50% decrease in sleep related deaths from 2016 to 2018
Reduce prematurity birth rate ≤ 37 weeks from 13% in 2015 towards 2020 goal of 8.1% live births	 Implemented Community Health Worker program, funded by Ohio Department of Medicaid grant to reach at risk pregnant patients and connect them with resources including progesterone administration Educated more than 98% of Mahoning Valley NICU mothers eligible for progesterone in their next pregnancy over three year cycle
Improve birth spacing to ≥ 18 months for $\geq 75\%$ of deliveries	 Educated 500+ health care professionals through birth spacing programs >18 month birth spacing interval for black infants improved from 39.7% to 32.1% from 2016 to 2018 according to birth certificate data