

# community health needs assessment

2020





# FOREWORD

At Dayton Children's we are on the relentless pursuit of optimal health for all children in our reach. This community health assessment provides us with a snapshot of children's health in the Greater Dayton Area, as well as our state and nation so we have actionable data to inform that pursuit.

A healthy community is critical for healthy children to grow and thrive. We know a significant amount of a child's health is driven by social and behavioral factors including housing, education, access to food, and safe neighborhoods. These social drivers of health are explored through this assessment to get a better picture of how they impact our children's and community's health. We will use this report to develop and refine strategies that focus on wellness, access to care and connection to social needs so children in our community can truly thrive. In doing so, we know that healthy children will lead to healthy adults.

Funded by the Dayton Children's Foundation Board, the community health assessment is being conducted for the sixth time. It complies with Internal Revenue Service requirements and provides valuable insight to develop future community health programming for children.

Through collaboration with The Hospital Council of Northwest Ohio and public health researchers at The University of Toledo, every effort has been made to assure that this report contains valid and reliable data. We thank these partners for their expertise and guidance in this process.

We thank our many public health professional, child-serving organizations and social service partners who participated in the assessment and planning process. Their insights and feedback were invaluable to the work. We also thank the hundreds of parents who took the time to complete the assessment to ensure their voices were represented in the process.

It is our hope that this assessment will foster new collaborative opportunities and initiate data-driven, quality programs to improve the lives of children in our region. This assessment helps lay a foundation for strategic investments in our community's most precious resource – our children.

Sincerely,

**Deborah A. Feldman**  
President and CEO  
Dayton Children's Hospital

# ACKNOWLEDGEMENTS

## Funding for the 2020 Dayton Children’s Community Health Needs Assessment was provided by:

Dayton Children’s Hospital Foundation Board

### Input Provided by Community Partners:

**Helen Jones-Kelley**

Executive Director  
ADAMHS Board Montgomery County

**Erin Jeffries**

Division Manager—Community Development  
City of Dayton

**Aaron Morman, LSW**

Community Health Centers of Greater Dayton

**Emily Callen**

Community Food Equity Manager  
Dayton Children’s Hospital

**Jessica Saunders**

Director, Community Engagement  
Dayton Children’s Hospital

**Jonathan Thackeray, MD**

Chief Medical Community Health Officer  
Dayton Children’s Hospital

**Donna McCoy**

Site Coordinator  
Dayton Children’s Hospital/Kiser Neighborhood  
School

**Lee Lauren (Adler) Truesdale**

Chief Development Officer  
Dayton Food Bank

**Dawn Abbott**

Director, Health Services  
Dayton Public Schools

**Rhonda Mercks**

Director  
ECHO (Empowering Children with Hope and  
Opportunity)

**Gina McFarlane-El**

Chief Executive Officer  
Five Rivers Health Centers

**Nate Arnett**

Director of Aventure Central  
Five Rivers Metroparks

**Lisa Henderson**

Vice President, Health Initiatives  
Greater Dayton Area Hospital Association

**Ashley Steveley**

Accreditation Coordinator  
Greene County Public Health

**Sheryl Wynn**

Accreditation Coordinator  
Greene County Public Health

**Janel Hodges, RS**

Epidemiologist  
Miami County Public Health

**Anita Biles**

Director of Health and Nutrition  
Miami Valley Child Development Centers

**Matt Lindsay**

Manager, Environmental Planning  
Miami Valley Regional Planning Commission

**Stacy Schweikhart**

Director of Strategy & Engagement  
Miami Valley Regional Planning Commission

**Matt Dunn**

Manager of Community Programming  
Montgomery County

**Kelly Geers**

Director of Strategic Initiatives  
Montgomery County

**Rachel Ward**

Manager of Community Programming  
Montgomery County

**Jewell Good**

Assistant Director for Montgomery County Job &  
Family Services/Children Services Administrator  
Montgomery County Children’s Services

**Shannon Cox**

Superintendent  
Montgomery County Educational Services Center

**Heather Koehl**

Instructional Supervisor – Social Emotional Learning  
Division  
Montgomery County Educational Services Center

**Geraldine Pegues**

Director, Human Services Planning and Development  
Montgomery County

**Charmaine Webster**

Director of Community Engagement and Outreach  
Preschool Promise

**Kyle Wallace**  
Epidemiologist  
Public Health--Dayton & Montgomery County

**Lora Davenport**  
Volunteer Services Specialist  
United Rehabilitation Services

**Melonya Cook**  
Director of Community Planning  
United Way of Greater Dayton

**Dustin Ratliff**  
Accreditation/CHA Coordinator  
Warren County Health District

**John Pascoe, MD, MPH**  
Professor of Pediatrics  
Wright State University Department of Pediatrics

**Marietta Orłowski, PhD**  
Assistant Professor and Chair, Population and Public  
Health Sciences  
Wright State University Department of Population  
and Public Health Sciences

**Megan Sullivan**  
Community Impact Director  
YMCA of Greater Dayton

A special thanks to Lauren Clark, MD, Jason Burchett, MD and Annabelle Soares, MD, and Madeline Boone, MPA-candidate, for their support of this project as part of coursework required by their educational preparation.

**Lauren Clark, MD**  
Pediatric Resident Physician  
Wright State University Boonshoft School of Medicine

**Jason Burchett, DO**  
MPH Candidate  
Wright State University Boonshoft School of Medicine

**Annabelle Soares, MD**  
Pediatric Resident Physician  
Wright State University Boonshoft School of Medicine

**Madeline Boone**  
MPA-candidate  
University of Dayton

## Contact Information:

**Jessica Saunders**  
Director, Community Engagement  
Dayton Children's Hospital  
One Children's Plaza  
Dayton, Ohio 45404-1815  
937-641-3385  
[saundersj@childrensdayton.org](mailto:saundersj@childrensdayton.org)

## Written Comments

Individuals are encouraged to submit written comments, questions, or other feedback about Dayton Children's Hospital strategies to [saundersj@childrensdayton.org](mailto:saundersj@childrensdayton.org).

## **Project Management, Secondary Data, Data Collection, and Report Development Hospital Council of Northwest Ohio**

### **Britney L. Ward, MPH**

Director of Community Health Improvement

### **Tessa Elliott, MPH**

Community Health Improvement Manager

### **Mallory Ohneck, MPH, CHES**

Community Health Improvement Data Manager

### **Carolynn McCartney**

Graduate Assistant

### **Natalie Deeb**

Graduate Assistant

### **Margaret Wielinski, MPH**

Interim Director of Community Health Improvement

### **Emily Stearns, MPH**

Community Health Improvement Manager

### **Gabrielle Mackinnon, MPH**

Community Health Improvement Coordinator

### **Jodi Franks**

Graduate Assistant

### **Bailey Fitzgerald**

Undergraduate Assistant

## **Data Collection & Analysis**

### **Joseph A. Dake, Ph.D., MPH**

Professor and Chair  
School of Population Health  
University of Toledo

### **Aaron J Diehr, PhD, CHES**

Consultant

**To see Greater Dayton Area data compared to other counties, please visit the Hospital Council of Northwest Ohio's Data Link website at:**

[www.hcno.org/community-services/data-link/](http://www.hcno.org/community-services/data-link/)

**The 2020 Dayton Children's Community Health Needs Assessment is available on the following websites:**

Dayton Children's Hospital

<https://www.childrensdayton.org/>

Hospital Council of Northwest Ohio

<http://www.hcno.org/community/reports.html>

# TABLE OF CONTENTS

## EXECUTIVE SUMMARY

<b>Internal Revenue Services (IRS) Requirements</b>	Pages 6-7
<b>Primary Data Collection Methods</b>	Pages 7-8
<b>Secondary Data Collection Methods</b>	Page 9
<b>Hospital Utilization Data Collection Methods</b>	Page 9
<b>2019 Ohio State Health Assessment (SHA)</b>	Page 10
<b>Data Summary</b>	Page 11
<b>Trend Summary</b>	Pages 12-15

## CHILD HEALTH

<b>Health and Functional Status</b>	Pages 16-27
<b>Health Care Access</b>	Pages 28-36
<b>Early Childhood (0-5 Years)</b>	Pages 37-40
<b>Middle Childhood (6-11 Years)</b>	Pages 41-43
<b>Social Drivers of Health</b>	Pages 44-67
<b>Parent Health</b>	Pages 68-70

## APPENDICES

<b>APPENDIX I — Health Assessment Information Sources</b>	Pages 71-72
<b>APPENDIX II — Acronyms and Terms</b>	Page 73
<b>APPENDIX III — Sample Demographic Profile</b>	Page 74
<b>APPENDIX IV — Demographics and Household Information</b>	Pages 75-81
<b>APPENDIX V — Hospital Utilization Data</b>	Pages 82-102
<b>APPENDIX VI — Evaluation of Impact</b>	Pages 103-106



# EXECUTIVE SUMMARY

This executive summary provides an overview of health-related data for children (ages 0 to 11) in the Greater Dayton Area whose parents participated in a regional health assessment survey during January-March 2020. The findings are based on self-administered surveys using a structured questionnaire. The questions were modeled after the survey instruments used by the National Survey of Children's Health (NSCH) developed by the Child and Adolescent Health Measurement Initiative. The Hospital Council of Northwest Ohio (HCNO) collected the data, guided the health assessment process, and integrated sources of primary and secondary data into the final report.

## Internal Revenue Services (IRS) Requirements

The Affordable Care Act (ACA), enacted in March 2010, added new Section 501 (r) requirements in Part V, Section B, for 501 (c)(3) organizations that operate one or more hospital facilities. Each 501 (c)(3) hospital organization must conduct a community health needs assessment and adopt an implementation strategy at least once every three years. This report meets these IRS requirements. Dayton Children's Hospital last CHNA was adopted by its board in June 2017.

## DEFINITION OF COMMUNITY & SERVICE AREA DETERMINATION

Dayton Children's serves 20 Ohio counties and eastern Indiana, however for the purposes of determining the community covered by this community health needs assessment the hospital chose to include our primary service area where 75 percent of our patient population comes from. This primary service area covers zip codes in Montgomery, Miami, Greene, Clark and Warren Counties. These counties represent urban, rural and suburban communities. Our health assessment focused on the pediatric population living in these counties. Special attention has been given to the City of Dayton in Montgomery County where Dayton Children's physically is located and health disparities for children are most challenging.

## INCLUSION OF VULNERABLE POPULATIONS

Approximately 29.4% of Dayton City residents were below the poverty line, according to the 2018 American Community Survey 1-year estimates. For this reason, data is broken down by income (less than \$25,000 and greater than \$25,000) throughout the report to show disparities. Where possible, data is also broken down by race and age to better understand where health disparities exist.

## PROCESS & METHODS FOR ENGAGING COMMUNITY

This community health needs assessment process was commissioned by Dayton Children's Hospital. Multiple sectors, including the general public, were asked to participate in the various phases of the project. Over 25 community partner agencies including health departments participated in choosing questions for the surveys, reviewing initial data, and identifying and prioritizing needs. Over 300 families took the parent perception survey. Community partners worked together to create one comprehensive assessment and plan. The assessment and plan were widely distributed to the public through the hospital website, through key constituent meetings and public launch with the media.

## QUANTITATIVE & QUALITATIVE DATA ANALYSIS

The Hospital Council of Northwest Ohio was contracted to collect and analyze the data and provide overall project management. Detailed data collection methods are described later in this section.

## IDENTIFYING & PRIORITIZING NEEDS

Dayton Children's Hospital met multiple times to complete the 2020-2023 Dayton Children's Implementation Plan (IP). Dayton Children's Hospital used the Mobilizing for Action through Planning and Partnerships (MAPP) process, which is a community-driven strategic planning process for improving community health. This framework helps communities apply strategic thinking to prioritize health issues and identify resources to address them. Dayton Children's contracted with the Hospital Council of Northwest Ohio, a neutral non-profit regional hospital association, to facilitate the process. Dayton Children's then invited key community leaders to participate in an



organized process of strategic planning to improve the health of children of the Greater Dayton Area. Then an internal team of Dayton Children’s leaders refined the priorities to ensure alignment with hospital strategy and investment.

Details of this process and its results can be found on the Dayton Children’s Hospital website. Dayton Children’s Hospital is focused on the following priority health outcomes: mental health and addiction, chronic disease, and maternal and infant health. Dayton Children’s Hospital will also focus on the following priority factors to address most, if not all, priority areas: community conditions, and access to care.

## **RESOURCES TO ADDRESS NEEDS**

The needs and priorities identified through the planning process resulted in a comprehensive 2020-2023 Dayton Children’s Hospital Implementation Plan. Numerous resources were identified to address the needs found in the report, which can be found on <https://www.childrensdayton.org/community/community-health/community-health-needs-assessment>.

## **EVALUATION OF IMPACT**

The evaluation of impact takes into consideration the feedback from the last community health needs assessment. Dayton Children’s Hospital publishes an implementation strategy update every year and the topic highlights are included in the evaluation of impact. Please see appendix VI for the Dayton Children’s Hospital Evaluation of Impact.

## **CHNA AVAILABILITY**

The 2020 Community Health Needs Assessment, as well as the various other assessments used in creating this report, can be found at the following websites:

Dayton Children’s Hospital: <https://www.childrensdayton.org/community/community-health/community-health-needs-assessment>

Hospital Council of Northwest Ohio: <http://www.hcno.org/community-services/community-health-assessments/>

## **ADOPTION BY BOARD**

The Dayton Children’s Hospital Board adopted the 2020 Community Health Needs Assessment on June 16, 2020.

## **Primary Data Collection Methods**

### **DESIGN**

This community health assessment was cross-sectional in nature and included a written survey of parents within the Greater Dayton Area. From the beginning, community leaders were actively engaged in the planning process and helped define the content, scope, and sequence of the study. Active engagement of community members throughout the planning process is regarded as an important step in completing a valid needs assessment.

### **INSTRUMENT DEVELOPMENT**

One survey instrument was designed and pilot tested for this study for parents of children ages 0 to 11. As a first step in the design process, health education researchers from the University of Toledo and staff members from HCNO met to discuss potential sources of valid and reliable survey items that would be appropriate for assessing the health status and health needs of children ages 0 through 11. The majority of the child survey items were derived from the NSCH. This decision was based on being able to compare local data with state and national data.

The Project Manager from the Hospital Council of Northwest Ohio conducted a series of meetings with the planning committee from the Greater Dayton Area. During these meetings, a bank of potential survey questions from the NSCH survey was reviewed and discussed. Based on input from the planning committee, the Project

Manager composed a draft of the survey containing 89 items. The draft was reviewed and approved by health education researchers at the University of Toledo.

## **SAMPLING | Child Survey**

The sampling frame for the child survey consisted of children ages 0 through 11 residing in the Greater Dayton Area. Using U.S. Census Bureau data, it was determined that 158,909 children ages 0 through 11 resided in the Greater Dayton Area (92 zip codes in Montgomery, Miami, Greene, Clark, and Warren counties). The investigators conducted a power analysis based on a post-hoc distribution of variation in responses (70/30 split) to determine what sample size was needed to ensure a 95% confidence level with corresponding confidence interval of 5% (i.e., we can be 95% sure that the “true” population responses are within a 5% margin of error). The sample size required to generalize to all Greater Dayton Area children ages 0 through 11 was 383. The random sample of mailing addresses was obtained from Melissa Data Corporation in Rancho Santa Margarita, California.

## **PROCEDURE | Child Survey**

Prior to mailing the survey to parents of 0 through 11-year-olds, the project team mailed an advance letter to 5,000 parents in the Greater Dayton Area. This advance letter was personalized; printed on Dayton Children’s Hospital letterhead; and signed by Deborah A. Feldman, President and CEO of Dayton Children’s Hospital. The letter introduced the health needs assessment project and informed the readers that they may be randomly selected to receive the survey. The letter also explained that the respondents’ confidentiality would be protected and encouraged the readers to complete and return the survey promptly if they were selected.

Three weeks following the advance letter, a mailing procedure was implemented to maximize the survey return rate. The initial mailing included a personalized hand signed cover letter (on Dayton Children’s Hospital letterhead) describing the purpose of the study, a questionnaire printed on white paper, a self-addressed stamped return envelope, and a \$2 incentive. Surveys returned as undeliverable were not replaced with another potential respondent. The response rate was 7% (n=335; CI=± 5.35).

## **DATA ANALYSIS**

Individual responses were anonymous. Only group data was available. All data was analyzed by health education researchers at the University of Toledo using SPSS 26.0. Crosstabs were used to calculate descriptive statistics for the data presented in this report.

## **LIMITATIONS**

As with all county assessments, it is important to consider the findings in light of all possible limitations. First, the community health needs assessment had a high response rate. However, if any important differences existed between the respondents and the non-respondents regarding the questions asked, this would represent a threat to the external validity of the results (the generalizability of the results to the population of the Greater Dayton Area). If there were little to no differences between respondents and non-respondents, then this would not be a limitation.

Second, it is important to note that although several questions were asked using the same wording as the NSCH questionnaire, the parent data collection method differed. The NSCH child data were collected using a set of questions from the total question bank and parents were asked the questions over the telephone rather than via mail survey. This survey asked parents questions regarding their young children. Should enough parents have felt compelled to respond in a socially desirable manner which is inconsistent with reality, this would represent a threat to the internal validity of the results.

Lastly, caution should be used when interpreting subgroup results, as the margin of error for any subgroup is higher than that of the overall survey.

## **Secondary Data Collection Methods**

HCNO collected secondary data from multiple sites, including county-level data, whenever possible. HCNO utilized sites such as National Survey of Children’s Health (NSCH), numerous CDC sites, U.S. Census data, Healthy People 2020, among other national and local sources. All primary data collected in this report is from the 2020 Greater Dayton Area Health Assessment. All other data is cited accordingly.

## **Hospital Utilization Data Collection Methods**


Dayton Children’s partnered with the Greater Dayton Area Hospital Association (GDAHA) and Ascend to incorporate county level hospital discharge and utilization data within the community health needs assessment. The hospital utilization data included within the community health assessment is from July 2018 through June 2019. Data is broken down into age, encounter type, and payer type where applicable.

Each hospital provides data to the Ohio Hospitalization Association (OHA) for statewide consolidated reporting. Those data are at the patient level, where patients are de-identified. Each data record represents a single hospital admission; hence, individuals who are hospitalized multiple times are included in the database for each time they are admitted/discharged from the hospital. The hospital utilization data allows us to track the number of discharges for any Ohio-based acute care hospital over time. The database includes key demographic information (age, gender, race, county of residence) as well as information related to the hospitalization (primary diagnosis, and all secondary diagnoses). The data allowed us to isolate inpatients both in terms of where they were hospitalized (regardless of where they live) and where they live (regardless of where they were hospitalized).

For more information regarding hospital utilization data, see Appendix V.

## 2019 Ohio State Health Assessment (SHA)

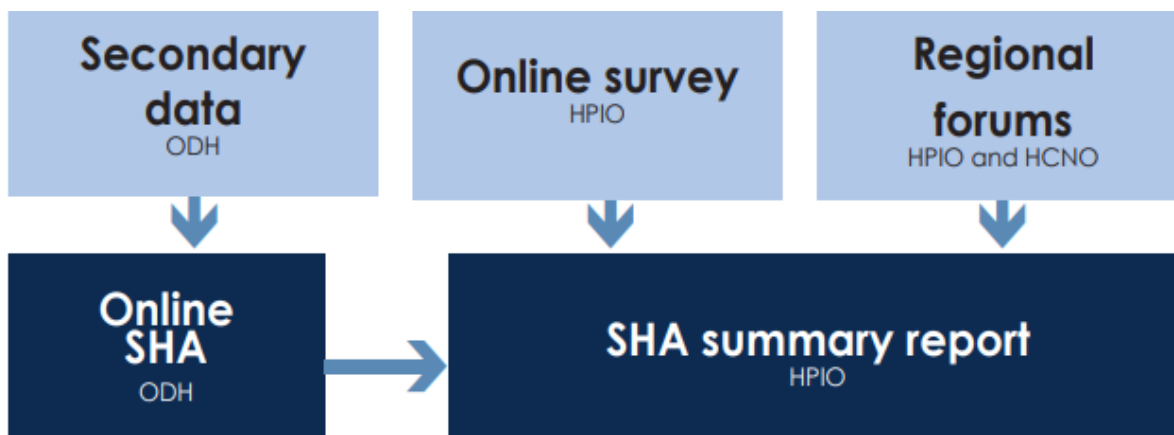
The 2019 Ohio State Health Assessment (SHA) provides data needed to inform health improvement priorities and strategies in the state. This assessment includes over 140 metrics, organized into data profiles, as well as information gathered through five regional forums, online surveys completed by over 300 stakeholders, and advisory and steering committee members who represented 13 state agencies, including sectors beyond health.

Similar to the 2019 Ohio SHA, the 2020 Greater Dayton Area Children’s Community Health Needs Assessment examined a variety of metrics from various areas of health including, but not limited to, health behaviors, chronic disease, access to health care, and social determinants of health. Additionally, the CHA studied themes and perceptions from local public health stakeholders from a wide variety of sectors. **Note: This symbol  will be displayed in the trend summary when an indicator directly aligns with the 2019 Ohio SHA.**

The interconnectedness of Ohio’s greatest health challenges, along with the overall consistency of health priorities identified in this assessment, indicates many opportunities for collaboration between a wide variety of partners at and between the state and local level, including physical and behavioral health organizations and sectors beyond health. It is our hope that this CHA will serve as a foundation for such collaboration.

To view the full 2019 Ohio State Health Assessment, please visit: <https://odh.ohio.gov/wps/portal/gov/odh/about-us/sha-ship/>

**FIGURE 1.1 | Components of the 2019 State Health Assessment (SHA)**



## Data Summary | Child Health

### HEALTH AND FUNCTIONAL STATUS

In 2020, 32% of children ages 0 to 11 were classified as overweight (16%) or obese (16%) by body mass index (BMI) calculations. Twelve percent (12%) of parents reported their child had been diagnosed with asthma. Forty-two (42%) of parents had not had their child tested for lead poisoning. More than three-fourths (79%) of parents reported their child exercised, played a sport, or participated in physical activity for at least 60 minutes on three or more days per week.

### HEALTH CARE ACCESS

In 2020, 3% of Greater Dayton Area parents reported that their 0 to 11 year old child did not have health insurance. Sixty-three percent (63%) of children received the seasonal flu vaccine in the past year, decreasing to 58% of parents with incomes less than \$25,000. Eighty-six percent (86%) of parents reported they had one or more people they think of as their child's personal doctor or nurse, decreasing to 62% of those with incomes less than \$25,000.

### EARLY CHILDHOOD (AGES 0 TO 5)

Ninety-two percent (92%) of mothers received prenatal care within the first three months during their last pregnancy. Seven percent (7%) of mothers smoked or used tobacco products during their last pregnancy. Eighty-two percent (82%) of parents put their child to sleep in a crib/bassinette without bumper, blankets, or stuffed animals.

### MIDDLE CHILDHOOD (AGES 6 TO 11)

Nine percent (9%) of parents felt their child was not safe at school due to fear of bullying. Twenty-eight percent (28%) of parents reported their child was bullied at some time in the past year. Ninety-two percent (92%) of parents reported their child participated in extracurricular activities in the past year. Eighty percent (80%) of parents reported their child exercises, played a sport, or participated in physical activity for at least 60 minutes on three or more days per week.


### SOCIAL DRIVERS OF HEALTH

Nearly half (47%) of parents reported they had a firearm in or around their home, decreasing to 32% of those with incomes less than \$25,000. Twelve percent (12%) of parents experienced food insecurity in the past year. Eight percent (8%) of children experienced two or more adverse childhood experiences in their lifetime.

### PARENTS HEALTH

In 2020, 17% of Greater Dayton Area parents were uninsured. Eight percent (8%) of parents rated their mental and emotional health as fair or poor, increasing to 24% of those with incomes less than \$25,000. In the past year, 55% of Greater Dayton area parents missed work due to their child's illnesses or injuries.

# CHILD 0-5 TREND SUMMARY

Child 0-5 Comparisons	Dayton 2020 Ages 0-5 (n=42)	Outside of Dayton 2020 Ages 0-5 (n=61)	Greater Dayton Area 2017 Ages 0-5	Greater Dayton Area 2020 Ages 0-5	Ohio 2017/18 Ages 0-5	U.S. 2017/18 Ages 0-5
<b>Health and Functional Status</b>						
<b>Rated health fair or poor</b> 	2%	2%	7%	2%	1%	1%
<b>Rated health as excellent or very good</b>	98%	98%	93%	98%	92%	93%
<b>Born premature</b> (three or more weeks before due date)	17%	12%	11%	14%	10%	12%
<b>Diagnosed with ADHD/ADD</b>	2%	0%	4%	1%	1%*	2%*
<b>Diagnosed with anxiety problems</b>	7%	2%	5%	4%	1%*	2%*
<b>Diagnosed with asthma</b>	19%	8%	7%	13%	4%	6%
<b>Diagnosed with behavioral or conduct problems</b>	5%	3%	6%	4%	3%*	5%*
<b>Diagnosed with depression</b>	0%	0%	2%	0%	0%*	<1%*
<b>Diagnosed with developmental delay</b>	9%	3%	15%	6%	10%*	8%*
<b>Diagnosed with learning disability</b>	9%	0%	10%	4%	1%*	2%*
<b>Diagnosed with speech or language disorder</b>	9%	15%	N/A	13%	6%*	11%*
<b>Two or more health conditions</b>	9%	7%	N/A	8%	5%	7%
<b>Health Care Access</b>						
<b>Had public insurance only</b>	31%	20%	30%	24%	32%	33%
<b>Been to doctor for preventive care in past year</b>	100%	98%	96%	99%	92% <sup>‡</sup>	89% <sup>‡</sup>
<b>Family had problems paying for child's medical or health care bills</b> (in past year)	5%	8%	9%	7%	7%	9%
<b>Child received treatment or counseling from a mental health professional</b> (in the past year)	2%	3%	3%	3%	2%*	3%
<b>Had at least one personal doctor or nurse</b>	83%	89%	87%	86%	72%	72%
<b>Received all the medical care they needed</b> (in the past year)	90%	97%	93%	94%	N/A	N/A
<b>Dental care visit</b> (in the past year)	63%	51%	49%	56%	52%**	62%**


N/A – Not Available

<sup>‡</sup>2016/17 NSCH data

\*Ages 3-5

\*\*Ages 1-5

 Indicates alignment with Ohio State Health Assessment

Child 0-5 Comparisons	Dayton 2020 Ages 0-5 (n=42)	Outside of Dayton 2020 Ages 0-5 (n=61)	Greater Dayton Area 2017 Ages 0-5	Greater Dayton Area 2020 Ages 0-5	Ohio 2017/18 Ages 0-5	U.S. 2017/18 Ages 0-5
<b>Early Childhood (Ages 0-5)</b>						
<b>Never breastfed their child</b>	15%	17%	30%	16%	20%	20%
<b>Parent read to child every day</b> (in the past week)	31%	37%	35%	34%	44% <sup>±</sup>	37% <sup>±</sup>
<b>Social Drivers of Health</b>						
<b>Family eats a meal together every day of the week</b>	54%	69%	49%	62%	57%	54%
<b>Two or more adverse childhood experiences (ACEs)</b> 	5%	5%	7%	5%	13%	10%
<b>Parent or family member quit a job, not take a job, or greatly change job because of problems with childcare for child</b> (in past year)	12%	5%	11%	8%	10%	9%
<b>Primary language spoken at home was dialect other than English</b>	0%	0%	1%	0%	5%	16%
<b>Family member received benefits from the Women, Infants, and Children (WIC) program</b> (in the past year)	10%	8%	18%	9%	17%	24%
<b>Family member received cash assistance from a government welfare program</b> (in the past year)	0%	3%	4%	2%	5%	4%
<b>Family member received Food Stamps or Supplemental Nutrition Assistance Program (SNAP) benefits</b> (in the past year)	5%	7%	17%	6%	19%	21%
<b>Family member received free or reduced-cost breakfasts or lunches at school</b> (in the past year)	5%	8%	9%	7%	17%	22%
<b>Parent Health</b>						
<b>Mother's mental/emotional health is fair/poor</b>	3%	9%	19%	6%	9%	5%
<b>Father's mental/emotional health is fair/poor</b>	27%	13%	11%	13%	7%	3%
<b>Mother's physical health status is fair/poor</b>	3%	2%	N/A	3%	3%	4%
<b>Father's physical health status is fair/poor</b>	9%	0%	N/A	4%	3%	5%


N/A – Not Available

<sup>±</sup> NSCH includes parent or other family member read to child

 Indicates alignment with Ohio State Health Assessment





# CHILD 6-11 TREND SUMMARY

Child 6-11 Comparisons	Dayton 2020 Ages 6-11 (n=95)	Outside of Dayton 2020 Ages 6-11 (n=128)	Greater Dayton Area 2017 Ages 6-11	Greater Dayton Area 2020 Ages 6-11	Ohio 2017/18 Ages 6-11	U.S. 2017/18 Ages 6-11
<b>Health and Functional Status</b>						
<b>Rated health fair or poor</b> 	2%	2%	5%	2%	2%	1%
<b>Rated health as excellent or very good</b>	98%	98%	95%	98%	89%	90%
<b>Born premature</b> (three or more weeks before due date)	15%	7%	11%	10%	14%	12%
<b>Diagnosed with ADHD/ADD</b>	17%	7%	10%	11%	14%	10%
<b>Diagnosed with anxiety problems</b>	15%	10%	8%	12%	9%	9%
<b>Diagnosed with asthma</b>	17%	8%	10%	12%	13%	13%
<b>Diagnosed with behavioral or conduct problems</b>	11%	2%	4%	6%	13%	10%
<b>Diagnosed with depression</b>	2%	2%	1%	2%	1%	2%
<b>Diagnosed with developmental delay</b>	5%	2%	9%	4%	8%	8%
<b>Diagnosed with learning disability</b>	6%	2%	5%	4%	11%	9%
<b>Diagnosed with speech or language disorder</b>	13%	13%	N/A	13%	10%	10%
<b>Two or more health conditions</b>	21%	12%	N/A	16%	23%	21%
<b>Health Care Access</b>						
<b>Had public insurance only</b>	13%	16%	15%	14%	25%	32%
<b>Been to doctor for preventive care</b> (in past year)	93%	91%	83%	92%	81% <sup>‡</sup>	80% <sup>‡</sup>
<b>Family had problems paying for child's medical or health care bills</b> (in past year)	15%	9%	12%	12%	10%	11%
<b>Child received treatment or counseling from a mental health professional</b> (in the past year)	16%	9%	12%	12%	10%	9%
<b>Had at least one personal doctor or nurse</b>	84%	88%	87%	86%	77%	72%
<b>Received all the medical care they needed</b> (in the past year)	85%	85%	98%	85%	N/A	N/A
<b>Dental care visit</b> (in the past year)	89%	91%	94%	90%	93%	92%

N/A – Not Available

<sup>‡</sup>2016/17 NSCH data

 Indicates alignment with Ohio State Health Assessment

Child 6-11 Comparisons	Dayton 2020 Ages 6-11 (n=95)	Outside of Dayton 2020 Ages 6-11 (n=128)	Greater Dayton Area 2017 Ages 6-11	Greater Dayton Area 2020 Ages 6-11	Ohio 2017/18 Ages 6-11	U.S. 2017/18 Ages 6-11
<b>Middle Childhood (Ages 6-11)</b>						
<b>Child participated in one or more activities</b> (in past year)	88%	94%	N/A	92%	78%	78%
<b>Child did not miss any days of school because of illness or injury</b>	23%	16%	13%	19%	28%	29%
<b>Did not engage in any physical activity</b> (during the past week) 	3%	2%	N/A	2%	7%	6%
<b>Social Drivers of Health</b>						
<b>Family eats a meal together every day of the week</b>	34%	49%	35%	37%	44%	45%
<b>Two or more adverse childhood experiences (ACEs)</b> 	12%	5%	9%	8%	27%	20%
<b>Parent or family member quit a job, not take a job, or greatly change job because of problems with childcare for child</b> (in past year)	5%	3%	2%	4%	N/A	N/A
<b>Primary language spoken at home was dialect other than English</b>	0%	0%	1%	0%	5%	14%
<b>Received benefits from the WIC program</b> (in the past 12 months)	1%	0%	0%	1%	11%	9%
<b>Received cash assistance from a government welfare program</b> (in the past year)	0%	2%	2%	1%	4%	4%
<b>Family member received Food Stamps or Supplemental Nutrition Assistance Program (SNAP) benefits</b> (in the past year)	10%	6%	8%	8%	24%	20%
<b>Family member received free or reduced-cost breakfasts or lunches at school</b> (in the past year)	16%	11%	16%	13%	33%	39%
<b>Parent Health</b>						
<b>Mother's mental/emotional health is fair/poor</b>	12%	5%	13%	8%	9%	5%
<b>Father's mental/emotional health is fair/poor</b>	11%	6%	19%	6%	4%	3%
<b>Mother's physical health status is fair/poor</b>	12%	6%	N/A	9%	7%	6%
<b>Father's physical health status is fair/poor</b>	11%	3%	N/A	6%	7%	4%

N/A – Not Available

 Indicates alignment with Ohio State Health Assessment

# Health and Functional Status

## Key Findings

In 2020, 32% of children ages 0 to 11 were classified as overweight (16%) or obese (16%) by body mass index (BMI) calculations. Twelve percent (12%) of parents reported their child had been diagnosed with asthma. Forty-two (42%) of parents had not had their child tested for lead poisoning. More than three-fourths (79%) of parents reported their child exercised, played a sport, or participated in physical activity for at least 60 minutes on three or more days per week.

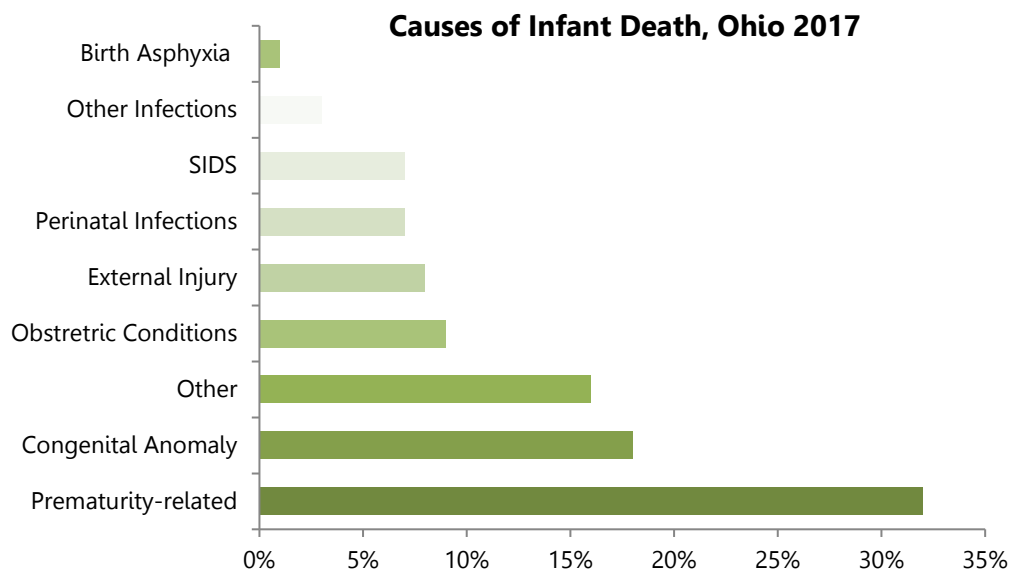
## General Health Status

- In 2020, 98% of Greater Dayton Area parents rated child's health as excellent or very good. Two percent (2%) of parents rated their child's health as fair. No parent rated their child's health as poor.
- Twelve percent (12%) of parents reported their child was born premature (more than three weeks before his or her due date).

## Causes of Infant Death

*The below graph is from the 2018 Ohio Infant Mortality Data Annual Report. The graph shows the causes of infant death in Ohio in 2017.*

- Prematurity-related causes were the underlying cause of death for 32% of Ohio infants. Of the prematurity-related cases in Ohio, 54% of their mothers were low income but only half of those received WIC benefits during pregnancy. Thirty-nine percent (39%) of Ohio mothers received no prenatal care in the first trimester, and 41% of mothers were black (Source: Ohio Department of Health, Infant Mortality Annual Report, 2018).



(Source for graph: Ohio Department of Health, Infant Mortality Annual Report, 2018)

## Five-Year Average Infant Mortality Rates by County (2014-2018)

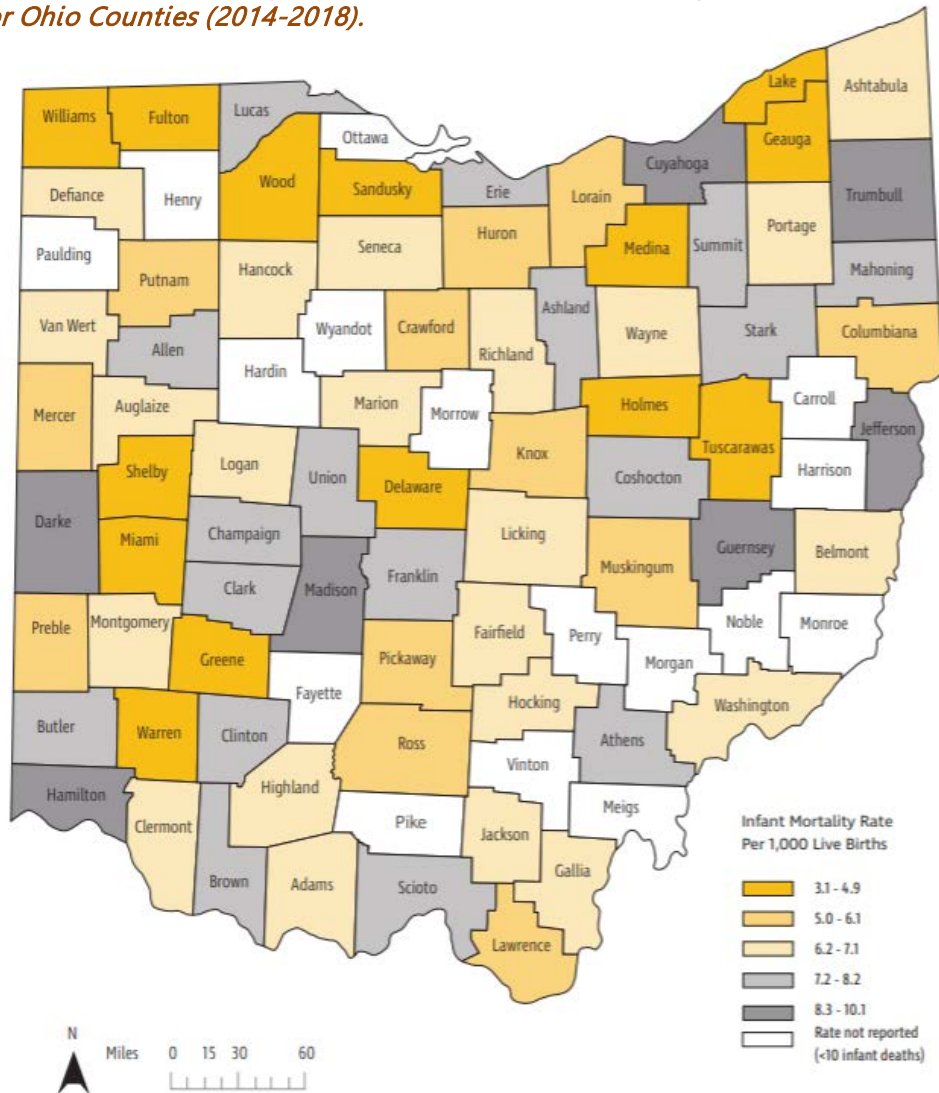
The below table is from the 2018 Ohio Infant Mortality Data Annual Report. The table indicates county level infant mortality data (per 1,000 live births) for the Greater Dayton Area.

	Total Deaths	Total Births	Infant Mortality Rate
<b>Ohio</b>	4,903	689,146	5.8
<b>Clark County</b>	58	7,942	7.3
<b>Green County</b>	42	8,979	4.7
<b>Miami County</b>	29	5,981	4.8
<b>Montgomery County</b>	232	33,122	7.0
<b>Warren County</b>	49	11,843	4.1

(Source: Ohio Department of Health, Infant Mortality Annual Report, 2018)

## Ohio Five-Year Average Infant Mortality Rates by County (2014-2018)

The below figure from the Ohio Department of Health indicates five-year infant mortality rates (per 1,000 live births) for Ohio Counties (2014-2018).



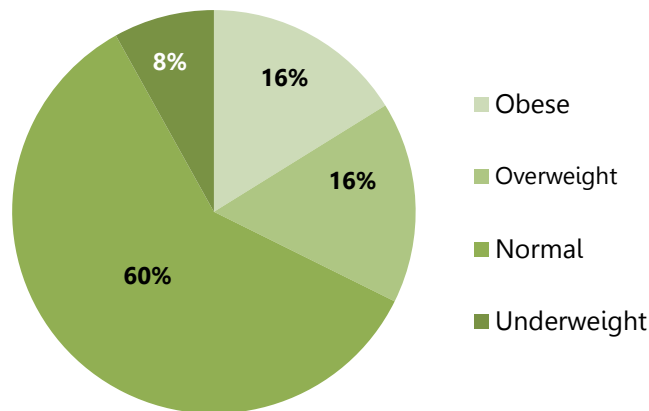
(Source: Ohio Department of Health, Infant Mortality Annual Report, 2018)

## Weight Status

- Sixteen percent (16%) of children were classified as obese by body mass index (BMI) calculations; 16% were classified as overweight; 60% were normal weight; and 8% were underweight.

*The following pie chart shows the percent of Greater Dayton Area, children who were obese, overweight, normal weight, and underweight.*

**2020 Greater Dayton Area Child BMI**

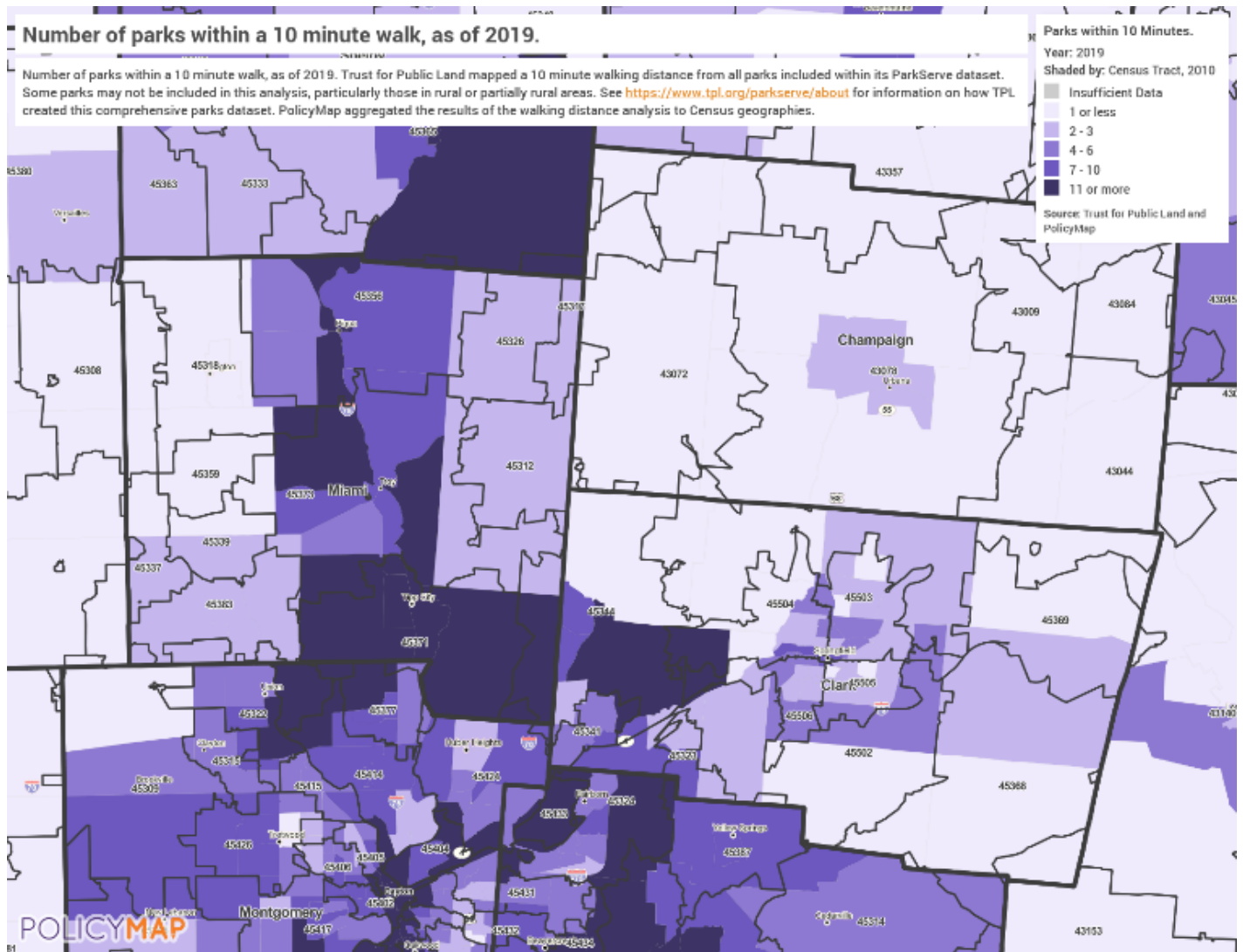


- More than three-fourths (79%) of parents reported their child exercised, played a sport, or participated in physical activity for at least 60 minutes on three or more days per week. Forty-two percent (42%) were physically active on five or more days, and 21% were physically active for at least 60 minutes every day per week. Four percent (4%) of parents reported their child did not engage in any physical activity in the past week.
- On an average day of the week, Greater Dayton Area children spent:
  - 2.2 hours on screen time (TV, video games, mobile devices)
  - 1.7 hours playing outdoors
  - 1.5 hours reading
- On an average night, parents reported their child slept:
  - Seven hours or less (4%)
  - Eight hours (15%)
  - Nine hours (33%)
  - Ten hours (31%)
  - Eleven hours or more (17%)

## Nutrition

- Children ate fruit: 4 or more times per day (4%); 2 to 3 times per day (42%); once per day (18%); 4 to 6 times during the past week (19%); and 1 to 3 times during the past week (15%). Two percent (2%) of parents reported that their child did not eat fruit during the past week.
- Children ate vegetables: 4 or more times per day (4%); 2 to 3 times per day (33%); once per day (22%); 4 to 6 times during the past week (20%); and 1 to 3 times during the past week (16%). Five percent (5%) of parents reported that their child did not eat vegetables during the past week.
- Children drank soda or pop: 4 or more times per day (1%); 2 to 3 times per day (1%); once per day (2%); 4 to 6 times during the past week (4%); and 1 to 3 times during the past week (34%). Fifty-eight percent (58%) of parents reported that their child did not drink soda or pop during the past week.

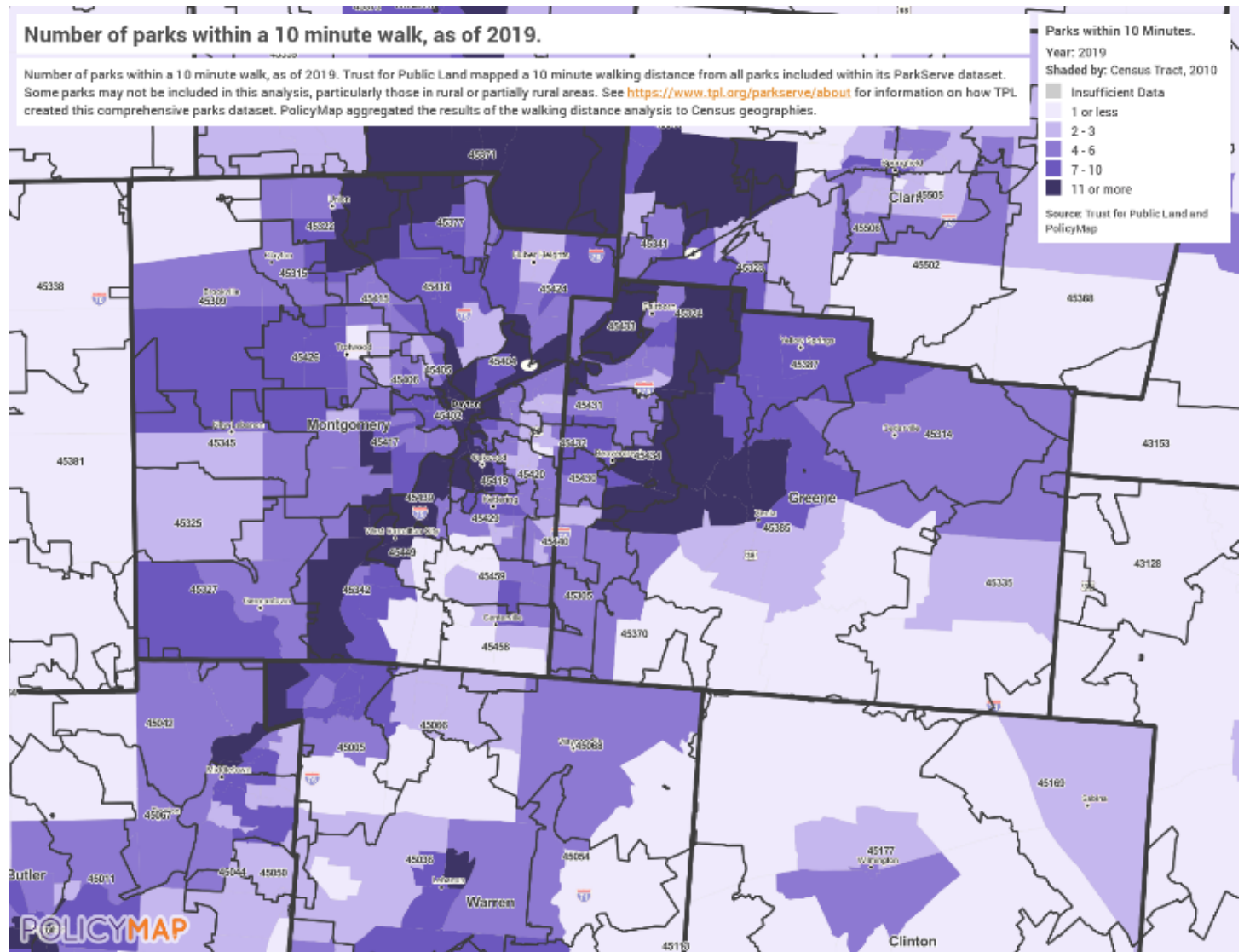
## Number of Parks within a 10 Minute Walk – Miami County and Clark County



Source of Number of Parks Within a 10 Minute Walk: Trust for Public Land. Number of Parks within a 10 Minute Walk 2019. PolicyMap. <https://plcy.mp/hpMns6C> (02 March 2020).



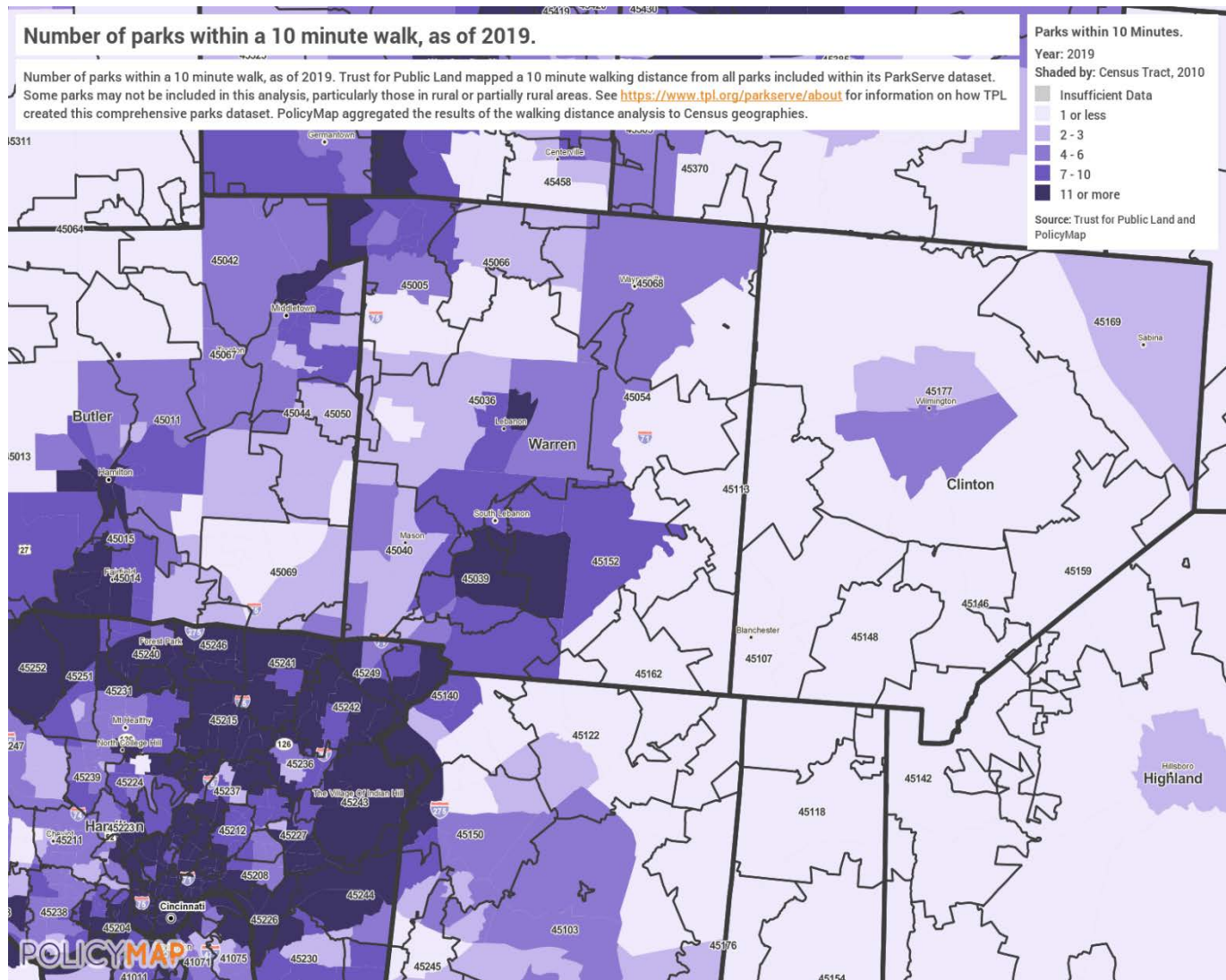
## Number of Parks within a 10 Minute Walk – Montgomery County and Greene County



Source of Number of Parks Within a 10 Minute Walk: Trust for Public Land. Number of Parks within a 10 Minute Walk 2019. PolicyMap. <https://plcy.mp/vg6jPdI> (02 March 2020).



## Number of Parks within a 10 Minute Walk – Warren County

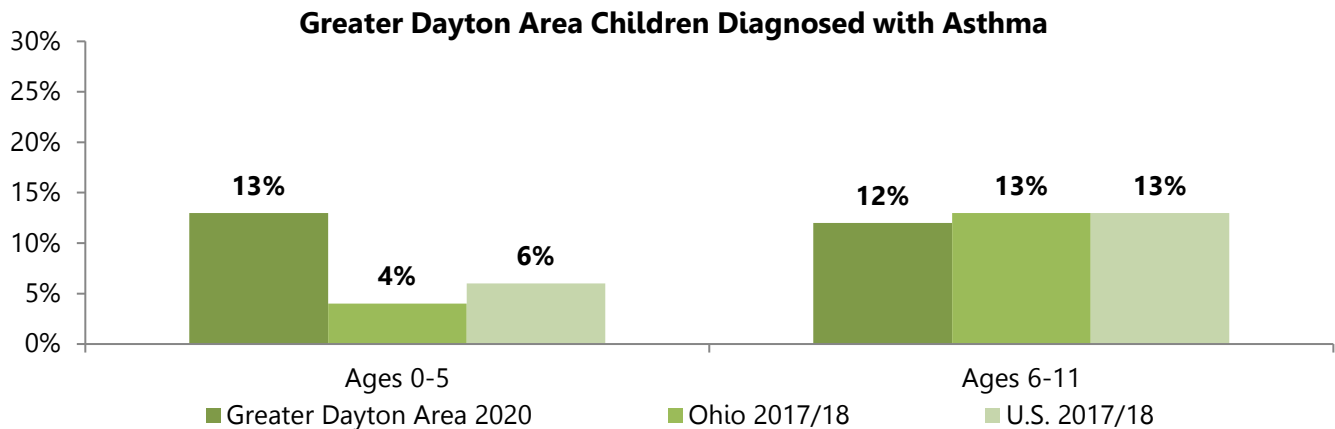


Source of Number of Parks Within a 10 Minute Walk: Trust for Public Land. Number of Parks within a 10 Minute Walk 2019. PolicyMap. <https://plcy.mp/q8CQqf1> (02 March 2020)

## Health Conditions

- Greater Dayton Area parents were told by a doctor that their child had the following conditions:
  - Speech and language delay (13%)
  - Asthma (12%)
  - Anxiety problems (10%)
  - ADD/ADHD (8%)
  - Obese/overweight (7%)
  - Behavioral/conduct problem (6%)
  - Developmental delay (4%)
  - Learning disability (4%)
  - Autism (3%)
  - Brain injury, concussion or head injury (3%)
  - Genetic or inherited condition (3%)
  - Excessive anger (3%)
  - Obsessive-compulsive disorder (OCD) (2%)
  - Neonatal Abstinence Syndrome (1%)
  - Epilepsy/seizure disorder (1%)
  - Intellectual disability (1%)
  - Depression (1%)
  - Diabetes (1%)
  - Cerebral palsy (<1%)
  - Fetal alcohol syndrome (<1%)
- Fourteen percent (14%) of children had more than one type of health condition, increasing to 23% of those with incomes less than \$25,000.

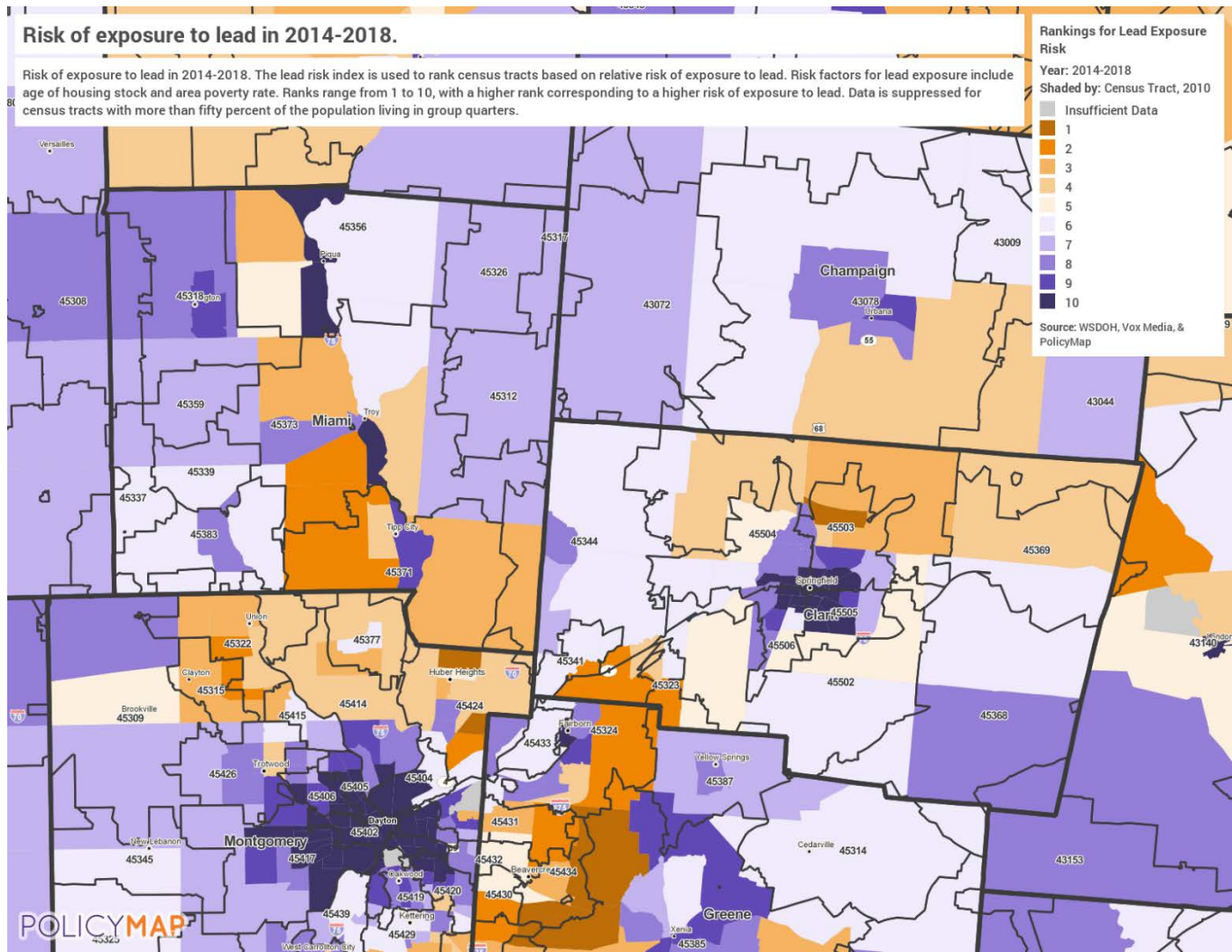
*The following graph shows the percent of Greater Dayton Area, Ohio and U.S. children who had been diagnosed with asthma.*



*(Source for graphs: 2017/18 National Survey of Children's Health & 2019 Dayton Children's Community Health Needs Assessment)*

- Seven percent (7%) of parents reported their child had an episode of asthma or asthma attack in the past year.
- Of parents who reported their child has an asthma attack in the past six months, they reported taking them for treatment at: home (83%), a doctor's office (22%), an emergency room (17%), and urgent care center (11%).
- Of children diagnosed with autism/ASD or Developmental Delay, 34% had received therapy services to meet his or her developmental needs, such as early intervention, occupational therapy, or behavioral therapy.
- Parents reported their child was taking prescription medication for the following conditions: attention deficit disorder or attention/deficit hyperactivity disorder (ADD/ADHD) (6%), anxiety problems (2%), depression (1%), autism or autism spectrum disorder (ASD) (1%), easy to anger/aggressive (1%), and obsessive-compulsive disorder (OCD) (<1%).
- Forty-four percent (44%) of parents reported their child had been tested for lead poisoning, increasing to 63% of children enrolled in a public insurance program such as Medicaid. One percent (1%) of parents reported their child was tested, levels were elevated, and medical follow-up was needed. Forty-two (42%) of parents had not had their child tested for lead poisoning, and 14% did not know.

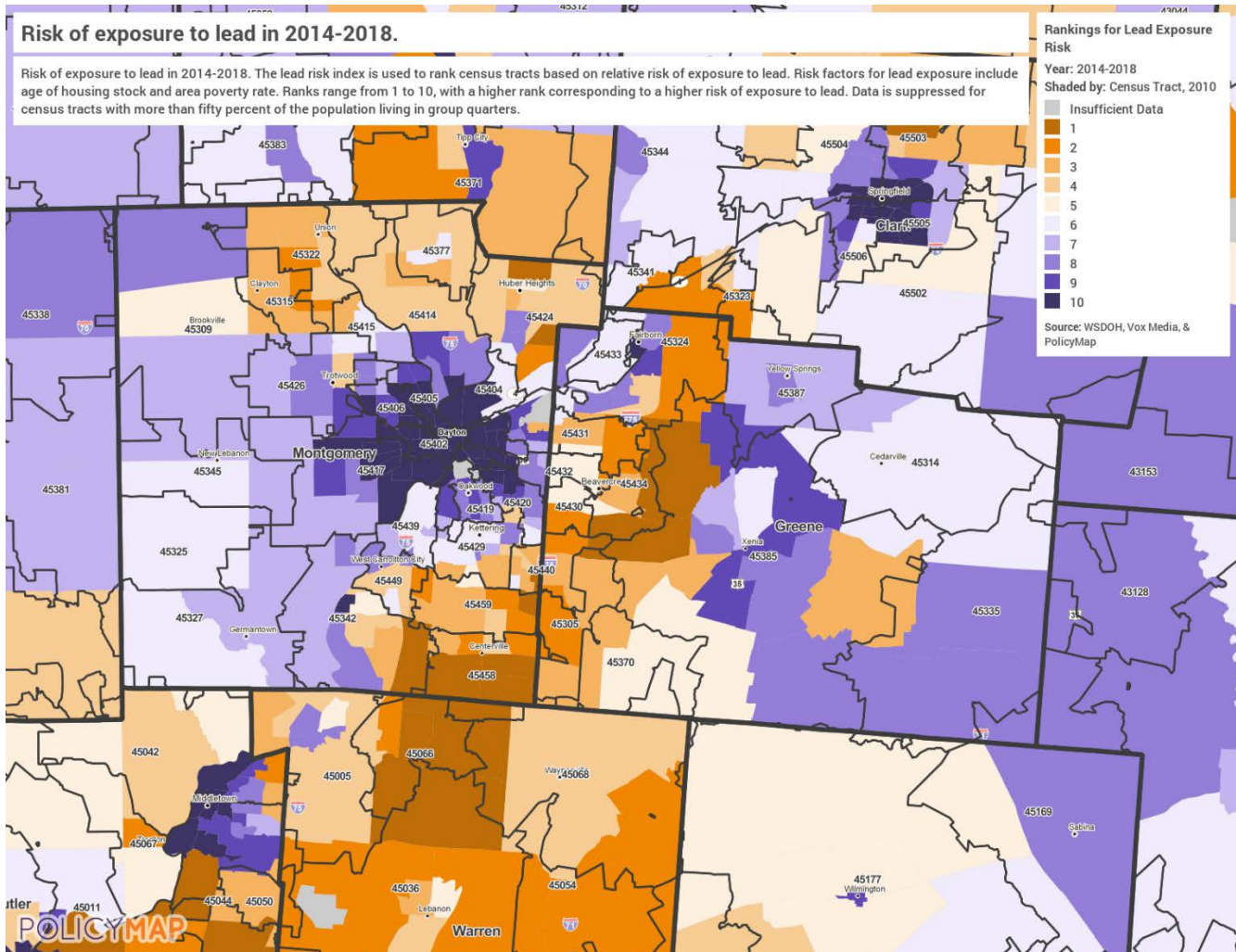
## Lead Exposure Risk – Miami County and Clark County



Source of Lead Exposure Risk Maps: Washington State Department of Health, Vox Media, and PolicyMap. Lead Exposure Risk Index 2014-2018. PolicyMap. <https://plcy.mp/w9LjSFG> (02 March 2020).

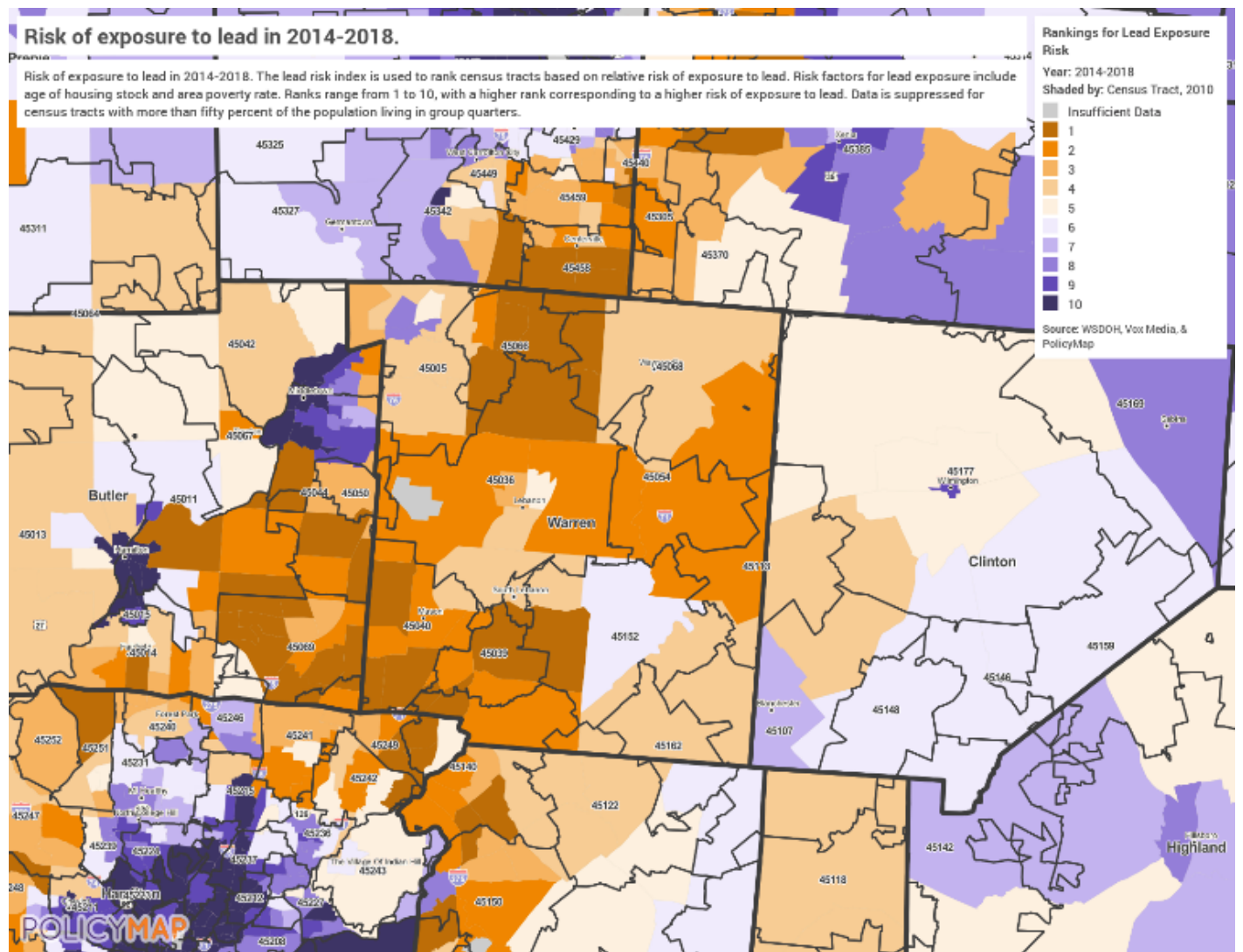


## Lead Exposure Risk – Montgomery County and Greene County



Source of Lead Exposure Risk Maps: Washington State Department of Health, Vox Media, and PolicyMap. Lead Exposure Risk Index 2014-2018. PolicyMap. <https://plcy.mp/vYVSFkg> (02 March 2020).

## Lead Exposure Risk – Warren County



Source of Lead Exposure Risk Maps: Washington State Department of Health, Vox Media, and PolicyMap. Lead Exposure Risk Index 2014-2018. PolicyMap. <https://plcy.mp/crwtFhb> (02 March 2020).

## Behavioral and Emotional Health

- Twelve percent (12%) of parents reported their child had an emotional, developmental, or behavioral problem for which they needed treatment or counseling.
- More than one fourth (27%) of Greater Dayton Area children had difficulties in the following areas:
  - Emotions/moods (18%)
  - Concentration (13%)
  - Behavior (8%)
  - Being able to get along with people (3%)
  - Aggression with peers (2%)
- Eleven percent (11%) of parents reported their child had more than one difficulty.
- Parents reported that difficulties were managed in the following ways: family and friends took care of it (60%), school/day care (44%), and professional help (41%). Six percent (6%) of parents reported difficulties were not being managed and 6% of parents reported they did not have support managing difficulties. Thirteen percent (13%) of parents said they did not need help managing difficulties.

Child 0-5 Comparisons	Dayton 2020 Ages 0-5 (n=42)	Outside of Dayton 2020 Ages 0-5 (n=61)	Greater Dayton Area 2017 Ages 0-5	Greater Dayton Area 2020 Ages 0-5	Ohio 2017/18 Ages 0-5	U.S. 2017/18 Ages 0-5
<b>Rated health as excellent or very good</b>	98%	98%	93%	98%	92%	93%
<b>Rated health as fair or poor</b>	2%	2%	7%	2%	1%	1%
<b>Born premature</b> (three or more weeks before due date)	17%	12%	11%	14%	10%	12%
<b>Diagnosed with ADHD/ADD</b>	2%	0%	4%	1%	1%*	2%*
<b>Diagnosed with anxiety problems</b>	7%	2%	5%	4%	1%*	2%*
<b>Diagnosed with asthma</b>	19%	8%	7%	13%	4%	6%
<b>Diagnosed with behavioral or conduct problems</b>	5%	3%	6%	4%	3%*	5%*
<b>Diagnosed with depression</b>	0%	0%	2%	0%	0%*	<1%*
<b>Diagnosed with developmental delay</b>	9%	3%	15%	6%	10%*	8%*
<b>Diagnosed with learning disability</b>	9%	0%	10%	4%	1%*	2%*
<b>Diagnosed with speech or language disorder</b>	9%	15%	N/A	13%	6%*	11%*
<b>Two or more health conditions</b>	9%	7%	N/A	8%	5%	7%

N/A – Not Available

\*Ages 3-5 year old

Child 6-11 Comparisons	Dayton 2020 Ages 6-11 (n=95)	Outside of Dayton 2020 Ages 6-11 (n=128)	Greater Dayton Area 2017 Ages 6-11	Greater Dayton Area 2020 Ages 6-11	Ohio 2017/18 Ages 6-11	U.S. 2017/18 Ages 6-11
<b>Rated health as excellent or very good</b>	98%	98%	95%	98%	89%	90%
<b>Rated health as fair or poor</b>	2%	2%	5%	2%	2%	1%
<b>Born premature</b> (three or more weeks before due date)	15%	7%	11%	10%	14%	12%
<b>Diagnosed with ADHD/ADD</b>	17%	7%	10%	11%	14%	10%
<b>Diagnosed with anxiety problems</b>	15%	10%	8%	12%	9%	9%
<b>Diagnosed with asthma</b>	17%	8%	10%	12%	13%	13%
<b>Diagnosed with behavioral or conduct problems</b>	11%	2%	4%	6%	13%	10%
<b>Diagnosed with depression</b>	2%	2%	1%	2%	1%	2%
<b>Diagnosed with developmental delay</b>	5%	2%	9%	4%	8%	8%
<b>Diagnosed with learning disability</b>	6%	2%	5%	4%	11%	9%
<b>Diagnosed with speech or language disorder</b>	13%	13%	N/A	13%	10%	10%
<b>Two or more health conditions</b>	21%	12%	N/A	16%	23%	21%

N/A – Not Available



# Health Care Access

## Key Findings

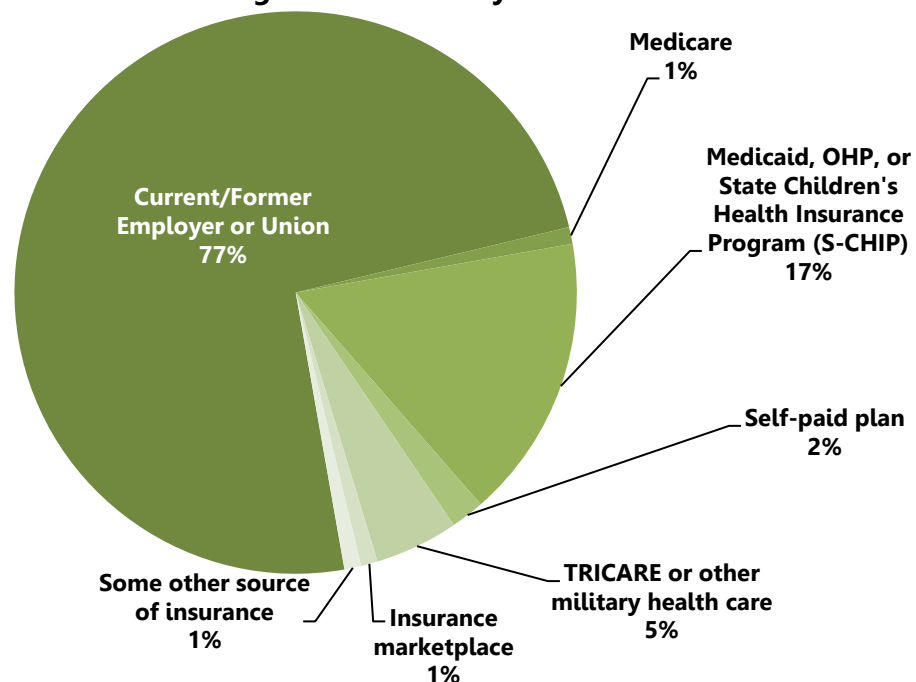
In 2020, 3% of Greater Dayton Area parents reported that their 0 to 11 year old child did not currently have health insurance. Sixty-three percent (63%) of children received the seasonal flu vaccine in the past year, decreasing to 58% of parents with incomes less than \$25,000. Eighty-six percent (86%) of parents reported they had one or more people they think of as their child's personal doctor or nurse, decreasing to 62% of those with incomes less than \$25,000.

## Health Insurance

- Three percent (3%) of parents in the Greater Dayton Area reported that their child did not currently have health insurance.
- Children had the following types of health insurance: parent's employer (77%), Medicaid or other public health benefits (17%), TRICARE or military health care (5%), self-paid (2%), Medicare (1%), Insurance Marketplace (1%), or some other source of insurance (1%).
- Parents reported their child's health insurance covered the following:
  - Doctor visits (99%)
  - Prescription coverage (99%)
  - Well child visits (99%)
  - Immunizations (99%)
  - Hospital stays (97%)
  - Dental (94%)
  - Vision (84%)
  - Mental health (82%)
  - Therapies (75%)

The following pie chart shows the sources of Greater Dayton Area children's health care coverage.

Sources of Health Coverage for Greater Dayton Area Children



## Medical Home

- Eighty-six percent (86%) of parents reported they had one or more people they think of as their child's personal doctor or nurse, decreasing to 62% of those with incomes less than \$25,000.
- Ninety-four percent (94%) of children had visited their health care provider for preventive care in the past year, increasing to 99% of 0 to 5 year olds.
- Nearly all (98%) parents reported that their child had one particular place they usually went if they were sick or needed advice about their health. They reported the following places:
  - A private doctor's office (86%)
  - An urgent care center (4%)
  - A community health center (1%)
  - A hospital emergency room (1%)
  - In-store health clinic (1%)
  - Mental health provider (<1%)
  - Chiropractor (<1%)
  - Family and friends (<1%)
  - Some other kind of place (<1%)
  - Four percent (4%) of parents reported multiple places and <1% did not know
- Thirteen percent (13%) of parents reported receiving a home visit from nurses, health care workers, social workers, or other professionals to their home to help prepare for the new baby or take care of the baby or mother, decreasing to 8% of those with incomes less than \$25,000.
- Nine percent (9%) of Greater Dayton Area children received mental health care or counseling from a mental health professional in the past year, increasing to 19% of those with incomes less than \$25,000.
- More than half (53%) of parents reported their child's health care provider looked like him or her. Thirty-three percent (33%) of parents reported they did not look like him or her, and 14% did not know.
- Ninety-one percent (91%) of Greater Dayton Area parents believed their health care provider was culturally responsive to their own and their child's needs. Two percent (2%) of parents did not believe they were culturally responsive, and 6% did not know. One percent (1%) of parents reported their child does not have a health care provider.

## Access and Utilization

- One out of ten (10%) parents reported their family had problems paying or were unable to pay any of their child's medical or health care bills in the past year.
- Two percent (2%) of parents reported their child's health suffered because of not being able to afford the cost of any needed care in the past year.
- Eighty-eight percent (88%) of children received all the medical care they needed in the past year. Parents who reported their child did not get all of the medical care they needed in the past year gave the following reasons: treatment is ongoing (21%), inconvenient times/could not get an appointment (15%), cost (8%), no insurance (8%), could not find a doctor who accepted child's insurance (8%), health plan problem (5%), not available in area/transportation problems (5%), dissatisfied with doctor (5%), dissatisfied with office staff (5%), did not know where to go for treatment (5%), no referral (3%), too long of a wait for an appointment (3%), missed an appointment and not allowed to go back to clinic (3%), specialist were not available (3%), and other reasons (5%).

- More than two-fifths (45%) of children received all the mental health care they needed in the past year. Greater Dayton Area parents who reported their child did not get all of the mental health care they needed in the past year gave the following reasons:
  - Cost (3%)
  - Could not find a doctor who accepted child's insurance (3%)
  - Inconvenient times/could not get an appointment (2%)
  - Stigma (1%)
  - No referral (1%)
  - Too long of a wait for an appointment (1%)
  - Did not know where to go for treatment (1%)
  - Not available in area/transportation problems (1%)
  - Dissatisfied with doctor/office staff (1%)
  - Specialist were not available (1%)
  - Other reasons (2%)

### **Current State of Children's Health as Seen Through Key Community Partners – Health Care Access**

- To better understand the state of children's health through the eyes of the community, community partners interviews were conducted with leaders that serve the youth population in the Greater Dayton area. Some key themes were discovered that influence the health of children in Dayton.
- Despite leader's best efforts there are still many challenges children face in the Greater Dayton Area when interacting with the health care system
  - Appointments hard to schedule for families that work shifts or have unreliable schedules. Many lower income individuals do not have a work schedule that extends two weeks out and makes scheduling doctors appointments challenging.
    - *"Parents that lower in various service lower economic sot their work schedules are undetermined they can't make a doctor's appointment 2 weeks ahead because they don't know what their work schedule is going to be."* - Heather Koehl, Montgomery County Educational Services Center
  - Lack of oral health programs for low income children in the community. Multiple interviewees felt there was not adequate dental services for low income members in the community.
    - *"Oral health for various reasons it seems to be the biggest issue And I think it comes down to lack of resources that we have in our community"* - Anita Biles, Health Coordinator, Miami Valley Child Development Centers
  - Poor communication between health care and schools. There have been problems where medication orders or safety plans are not communicated to the schools and this results in children missing school or spending time out of the classroom and in the school nurses' office.
    - *"We don't want the student to miss a week of school just because we don't have the release of parent signature to get medication orders."* - Dawn Abbott, Dayton Public Schools
  - Community leaders has expressed concerns that there is a lack of trust between health care providers and this results in less than ideal care for children, or over utilization of the emergency department.
    - *"I hear stores form patient's families feeling that maybe medical providers are not as in tune to their emotional needs."* - Heather Koehl, Montgomery County Educational Services Center

*(Source: Dayton Children's Hospital, Current State of Children's Health as Seen Through Key Community Partners, 2020)*

## Key Informant Interviews for Military Families

When establishing the questions for the survey for Dayton Children's 2020 Community Needs Assessment it was determined that there were populations in the community that would be underrepresented by the survey data. A significant population of military families live in the Greater Dayton Area and work at Wright Patterson Air Force Base. Phone surveys were conducted to learn more about the challenges faced by military families in the region which may impact pediatric health outcomes. Key themes identified through interviews include:

**Problems with navigating referrals and Tricare:** The Tricare system has some unique barriers. For example, to be seen by a specialist one needs to see their primary care provider first to get a referral. This is often helpful as many problems can be treated by a primary care physician however some things do need specialists to handle which can call challenges.

*"When there's an issue you need to go through Tricare and the primary care provider to get a referral and this can cause delays in care." – Parent*

Once the referral is placed it needs to be processed that can take 3-4 days before one can call and schedule an appointment. This was discussed as a major barrier to accessing care. Interviewees did express that once they are able to get an appointment there are minimal barriers other than scheduling which will be discussed below. This problem is also made worse by frequent movement which will also be discussed below.

**Discontinuity of care due to moving:** Families expressed that they have had problems with continuity of care due to moving. The military requires people move every 2-4 years, while this is an opportunity to see new parts of the world it is often a stressful time for families and children. One aspect that exacerbates this is any children with medical problems that are being treated at their previous base will need to have this care continued at their new base.

*"We started speech therapy in Germany and had to restart it when we got to Ohio."*

As mentioned above one needs a new referral to be allowed to see a specialist. With the delays in the processes, families felt that there is often a large delay during this time and is a major challenge that they face to obtaining optimal care.

**Trouble meeting schedule requirements for balancing school and work:** Families expressed that finding time to schedule appointments for children has also been a difficult. Most medical offices have normal business hours during the day and so to take a child to a doctor's appointment or therapy both the parent and the child need to miss school and work.

*"We don't want to interrupt their school so being stuck in this 10:30 appointment every week would be a nightmare."*

This can be more difficult for military members who work shift work and have difficulty getting time off work to take children to appointments. This can also be exacerbated by deployments where the family member who is at home becomes a single parent that may be dealing with multiple children.

**Having ample resources for medical care between Wright Patterson AFB and civilian medical providers:** One thing that was a positive that families expressed is the ample resources that are available to them for their children's health care.

*"The military has good medical coverage and that really opens up a lot of opportunities to pursue there's not as much a financial barrier that."*

There are ample programs on base for medical care and if there are not enough resources or the correct program on base then they are referred off base into the community where there are often no copays or out of pocket expenses.

**Waiting times for specialist appointments for children:** One family expressed concern for waiting times for specialist appointments. Her daughter has concern for a non-emergent issue.

*"I can't be seen until July 7th and that was in January so six months out for an appointment."*

When they called to make an appointment, they were placed on a six-month waiting list.

*(Source: Dayton Children's Hospital, Key Informant Interviews for Military Families, 2020)*

## Preventive Medicine

- Sixty-three percent (63%) of children received the seasonal flu vaccine in the past year, decreasing to 58% of parents with incomes less than \$25,000.
- Parents who did not get all of their child's recommended vaccinations gave the following reasons:
  - Child had received some, but not all recommended vaccinations (60%)
  - Parents chose to not vaccinate their child (40%)
  - Side effects of vaccines (35%)
  - Religious or cultural beliefs (15%)
  - Alternate vaccination schedule used (10%)
  - Not sure which are recommended (10%)
  - Too expensive (5%)
  - Other reasons (20%)

## Oral Health

- Eighty percent (80%) of children had been to the dentist in the past year, increasing to 90% of 6 to 11 year olds.
- Seventy-seven percent (77%) of children received all the dental care they needed in the past year. Parents who reported their child did not get all of the dental care needed in the past year gave the following reasons:
  - Child was not old enough to go to the dentist (52%)
  - Cost (12%)
  - Treatment is ongoing (10%)
  - No convenient times/could not get appointment (8%)
  - Could not find a dentist who accepted the child's insurance (7%)
  - No insurance (5%)
  - Health plan problem (5%)
  - No referral (3%)
  - Did not know where to go for treatment (3%)
  - Dissatisfaction with staff (3%)
  - Dissatisfaction with Medicaid dentist (3%)
  - Not available in area/transportation problems (3%)
  - Dissatisfaction with dentist (1%)
  - Child refused to go (1%)
  - Other (11%)
- Children last saw a dentist at a private dentist office (83%), school-based dental program (1%), Federally Qualified Health Center (FQHC) (1%), and other (2%). Four percent (4%) of parents reported their child did not go anywhere for dental services.

<b>Child 0-5 Comparisons</b>	<b>Dayton 2020 Ages 0-5 (n=42)</b>	<b>Outside of Dayton 2020 Ages 0-5 (n=61)</b>	<b>Greater Dayton Area 2017 Ages 0-5</b>	<b>Greater Dayton Area 2020 Ages 0-5</b>	<b>Ohio 2017/18 Ages 0-5</b>	<b>U.S. 2017/18 Ages 0-5</b>
<b>Had public insurance only</b>	31%	20%	30%	24%	32%	33%
<b>Been to doctor for preventive care in past year</b>	100%	98%	96%	99%	92% <sup>‡</sup>	89% <sup>‡</sup>
<b>Family had problems paying for child's medical or health care bills</b> (in past year)	5%	8%	9%	7%	7%	9%
<b>Child received treatment or counseling from a mental health professional</b> (in the past year)	2%	3%	3%	3%	2% <sup>*</sup>	3%
<b>Had at least one personal doctor or nurse</b>	83%	89%	87%	86%	72%	72%
<b>Received all the medical care they needed</b> (in the past year)	90%	97%	93%	94%	N/A	N/A
<b>Dental care visit</b> (in the past year)	63%	51%	49%	56%	52% <sup>**</sup>	62% <sup>**</sup>

<sup>‡</sup>2016/17 NSCH data

<sup>\*</sup>Ages 3-5

<sup>\*\*</sup>Ages 1-5

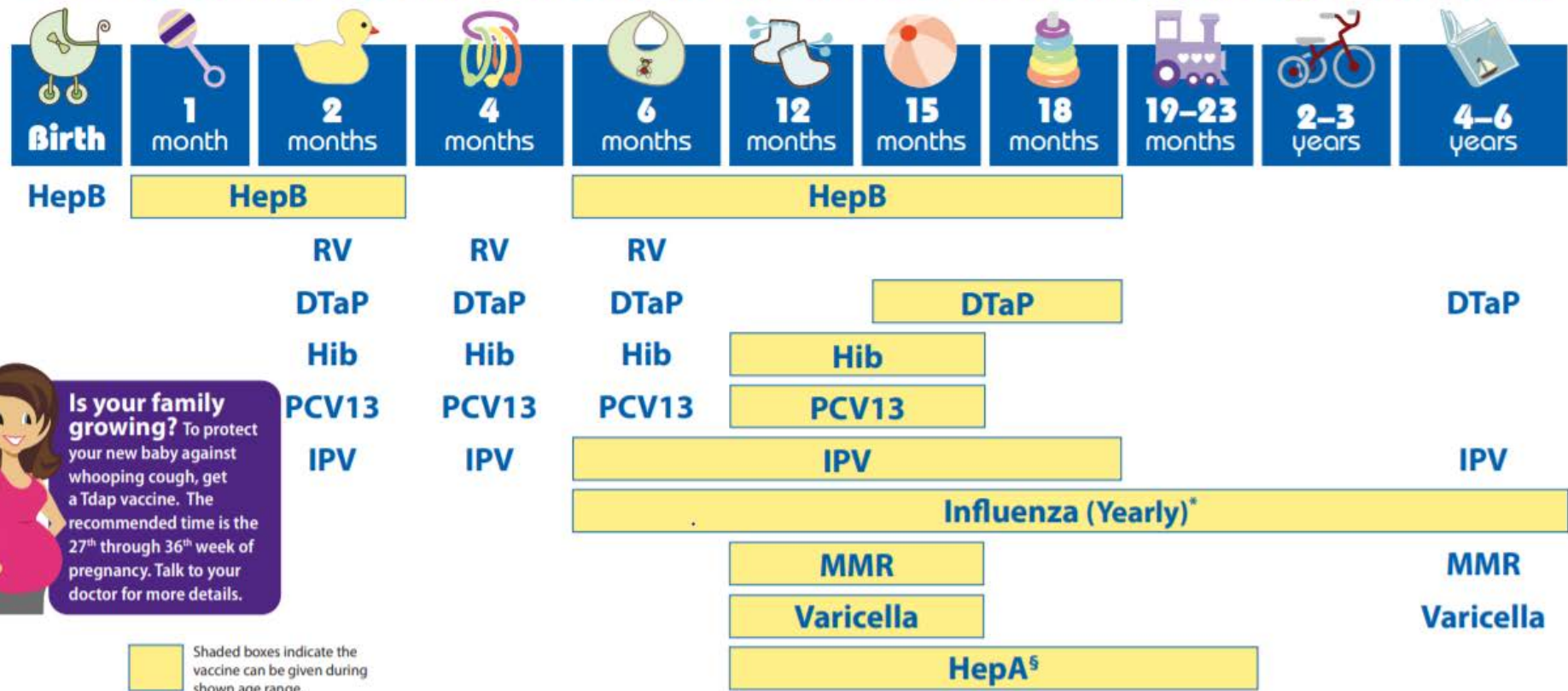
N/A-Not Available

<b>Child 6-11 Comparisons</b>	<b>Dayton 2020 Ages 6-11 (n=95)</b>	<b>Outside of Dayton 2020 Ages 6-11 (n=128)</b>	<b>Greater Dayton Area 2017 Ages 6-11</b>	<b>Greater Dayton Area 2020 Ages 6-11</b>	<b>Ohio 2017/18 Ages 6-11</b>	<b>U.S. 2017/18 Ages 6-11</b>
<b>Had public insurance only</b>	13%	16%	15%	14%	25%	32%
<b>Been to doctor for preventive care</b> (in past year)	93%	91%	83%	92%	81% <sup>‡</sup>	80% <sup>‡</sup>
<b>Family had problems paying for child's medical or health care bills</b> (in past year)	15%	9%	12%	12%	10%	11%
<b>Child received treatment or counseling from a mental health professional</b> (in the past year)	16%	9%	12%	12%	10%	9%
<b>Had at least one personal doctor or nurse</b>	84%	88%	87%	86%	77%	72%
<b>Received all the medical care they needed</b> (in the past year)	85%	85%	98%	85%	N/A	N/A
<b>Dental care visit</b> (in the past year)	89%	91%	94%	90%	93%	92%

<sup>‡</sup>2016/17 NSCH data  
N/A-Not Available



# 2020 Recommended Immunizations for Children from Birth Through 6 Years Old



**Is your family growing?** To protect your new baby against whooping cough, get a Tdap vaccine. The recommended time is the 27<sup>th</sup> through 36<sup>th</sup> week of pregnancy. Talk to your doctor for more details.

Shaded boxes indicate the vaccine can be given during shown age range.

**NOTE:**

If your child misses a shot, you don't need to start over. Just go back to your child's doctor for the next shot. Talk with your child's doctor if you have questions about vaccines.

**FOOTNOTES:**

- \* Two doses given at least four weeks apart are recommended for children age 6 months through 8 years of age who are getting an influenza (flu) vaccine for the first time and for some other children in this age group.
  - § Two doses of HepA vaccine are needed for lasting protection. The first dose of HepA vaccine should be given between 12 months and 23 months of age. The second dose should be given 6 months after the first dose. All children and adolescents over 24 months of age who have not been vaccinated should also receive 2 doses of HepA vaccine.
- If your child has any medical conditions that put him at risk for infection or is traveling outside the United States, talk to your child's doctor about additional vaccines that he or she may need.*

See back page for more information on vaccine-preventable diseases and the vaccines that prevent them.



(Source: CDC 2020 Recommended Vaccinations for Children (birth through 6 Years Old), Immunization Schedules, 2020)



Talk to your child’s doctor or nurse about the vaccines recommended for their age.

	Flu Influenza	Tdap Tetanus, diphtheria, pertussis	HPV Human papillomavirus	Meningococcal		Pneumococcal	Hepatitis B	Hepatitis A	Polio	MMR Measles, mumps, rubella	Chickenpox Varicella
				MenACWY	MenB						
7-8 Years	Shaded Green	Shaded Orange		Shaded Purple		Shaded Purple	Shaded Orange	Shaded Orange	Shaded Orange	Shaded Orange	Shaded Orange
9-10 Years	Shaded Green	Shaded Orange	Shaded Purple, Shaded Blue	Shaded Purple	Shaded Purple	Shaded Purple	Shaded Orange	Shaded Orange	Shaded Orange	Shaded Orange	Shaded Orange
11-12 Years	Shaded Green	Shaded Orange	Shaded Purple, Shaded Blue	Shaded Purple	Shaded Purple	Shaded Purple	Shaded Orange	Shaded Orange	Shaded Orange	Shaded Orange	Shaded Orange
13-15 Years	Shaded Green	Shaded Orange	Shaded Purple, Shaded Blue	Shaded Purple	Shaded Purple	Shaded Purple	Shaded Orange	Shaded Orange	Shaded Orange	Shaded Orange	Shaded Orange
16-18 Years	Shaded Green	Shaded Orange	Shaded Purple, Shaded Blue	Shaded Purple	Shaded Purple	Shaded Purple	Shaded Orange	Shaded Orange	Shaded Orange	Shaded Orange	Shaded Orange
<b>More information:</b>	Everyone 6 months and older should get a flu vaccine every year.	All 11- through 12-year olds should get one shot of Tdap.	All 11- through 12-year olds should get a 2-shot series of HPV vaccine. A 3-shot series is needed for those with weakened immune systems and those who start the series at 15 years or older.	All 11- through 12-year olds should get one shot of meningococcal conjugate (MenACWY). A booster shot is recommended at age 16.	Teens 16–18 years old <b>may</b> be vaccinated with a serogroup B meningococcal (MenB) vaccine.						



These shaded boxes indicate when the vaccine is recommended for all children unless your doctor tells you that your child cannot safely receive the vaccine.



These shaded boxes indicate the vaccine should be given if a child is catching up on missed vaccines.



These shaded boxes indicate the vaccine is recommended for children with certain health or lifestyle conditions that put them at an increased risk for serious diseases. See vaccine-specific recommendations at [www.cdc.gov/vaccines/hcp/acip-recs/](http://www.cdc.gov/vaccines/hcp/acip-recs/).



This shaded box indicates children not at increased risk may get the vaccine if they wish after speaking to a provider.



U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention

(Source: 2020 Recommended Immunizations for Children (7-18 Years Old), Immunization Schedule, 2020)

# Early Childhood (Ages 0 to 5)

## Key Findings

*The following information was reported by Greater Dayton Area parents of 0 to 5 year olds. Ninety-two percent (92%) of mothers received prenatal care within the first three months during their last pregnancy. Seven percent (7%) of mothers smoked or used tobacco products during their last pregnancy. Eighty-two percent (82%) of parents put their child to sleep in a crib/bassinette without bumper, blankets, or stuffed animals.*

## Early Childhood

- During the past month, parents reported their child regularly attended the following: child care outside their home provided by a relative other than a parent/guardian (34%); nursery school, preschool, or kindergarten (33%); child care center (30%); child care in their home provided by a relative other than a parent/guardian (30%); family-based child care outside of your home (27%); child care in your home provided by a baby sitter (13%); elementary school (7%); and Head Start or Early Start program (2%).
- Parents reported they read to their child: every day (35%), almost every day (37%), a few times a week (22%), and a few times a month (4%). Two percent (2%) of parents reported never reading to their child due to lack of interest from the child.
- During their last pregnancy, mothers did the following:
  - Received prenatal care with the first three months (92%)
  - Took a prenatal vitamin with folic acid during pregnancy (88%)
  - Took a prenatal vitamin with folic acid pre-pregnancy (67%)
  - Received a dental exam (62%)
  - Took folic acid during pregnancy (33%)
  - Used prescription drugs that were prescribed (29%)
  - Experienced depression during or after pregnancy (26%)
  - Received WIC services (20%)
  - Took folic acid pre-pregnancy (13%)
  - Smoked cigarettes or other tobacco products (7%)
  - Used marijuana (3%)
  - Used any drugs not prescribed (3%)
  - Used opioids (3%)
  - Consumed alcoholic beverages (2%)
  - Used e-cigarettes/vapes (1%)

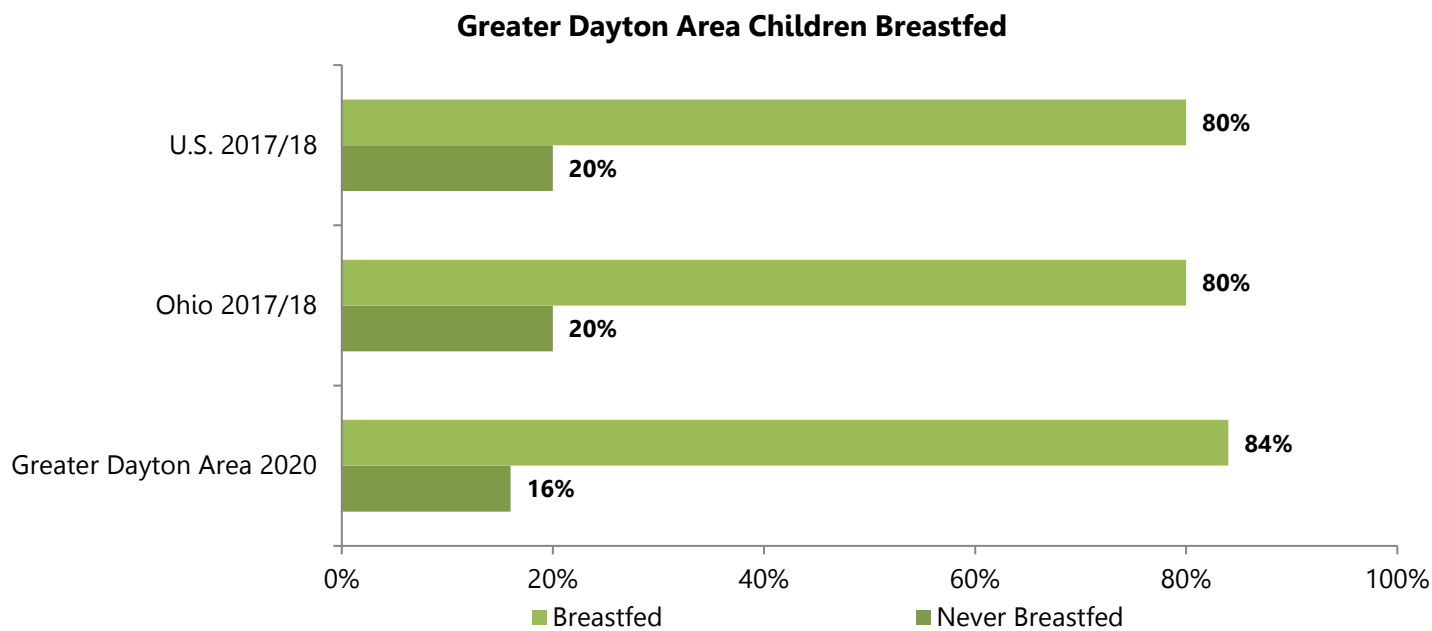
## How Can Smoking Harm Your Baby?

- Smoking while pregnant can cause many serious problems. Babies may be born too early, have a birth defect, or die from sudden infant death syndrome (SIDS). Even being around cigarette smoke can cause health problems for mothers and babies. It is best to quit smoking before getting pregnant but quitting while already pregnant can help protect mothers and babies from health problems. Smoking can cause the following to mothers and babies:
  - Babies may be born too small, even after a full-term pregnancy. Smoking slows a baby's development before birth
  - Smoking can damage a baby's developing lung and brain. The damage can last through childhood and teen years
  - Smoking doubles the risk of abnormal bleeding during pregnancy and delivery. This can put both mothers and babies in danger
  - Smoking raises the risk of birth defects, including cleft lip, cleft palate, or both. This may cause trouble eating properly
  - Babies of moms who smoking during pregnancy and babies exposed to cigarette smoke after birth have a higher risk for SIDS

*(Source: Centers for Disease Control and Prevention, Smoking, Pregnancy, and Babies, updated March 23, 2020)*

- Greater Dayton Area parents reported putting their child to sleep in the following places: crib/bassinet without bumper, blankets, or stuffed animals (82%); pack n' play (51%); in bed with another person (30%); swing (25%); car seat (25%); crib/bassinet with bumper, blankets, or stuffed animals (11%); couch or chair/recliner (7%); and floor (6%).
- Mothers breastfed their child: three months or less (18%); four to six months (22%); seven to nine months (10%); ten months to one year (15%); more than one year (15%); still breastfeeding (1%); and never breastfed (16%).
- Parents gave the following reasons why their child was not breastfed for a year: did not produce enough milk (42%), did not want to (14%), inconvenient (7%), did not have workplace support (7%), did not have time (4%), mother had medical issues (4%), did not have adequate support (3%), medical issue with baby (2%), did not have adequate education (1%), and other (13%).

*The following graph shows the percent of infants who had been breastfed or given breast milk from Greater Dayton Area, Ohio, and U.S.*



*(Source for graphs: 2017/18 National Survey of Children's Health & 2019 Dayton Children's Community Health Needs Assessment)*

### Breastfeeding – Recommendations and Benefits

- The American Academy of Pediatrics recommends exclusive breastfeeding for about 6 months, and then continuing while introducing complementary foods until children are 12 months or older. Breastfeeding is both good for the baby and mother. Breast milk is the best source of nutrition for most babies. As babies grow, breast milk changes to meet their needs. Breastfeeding may also protect the babies and mothers against some short- and long-term illnesses and diseases.
- Benefits to the baby include lower risk of:
  - Asthma
  - Obesity
  - Type 1 diabetes
  - Severe lower respiratory disease
  - Sudden infant death syndrome (SIDS)
  - Ear infections
  - Gastrointestinal infections (diarrhea/vomiting)

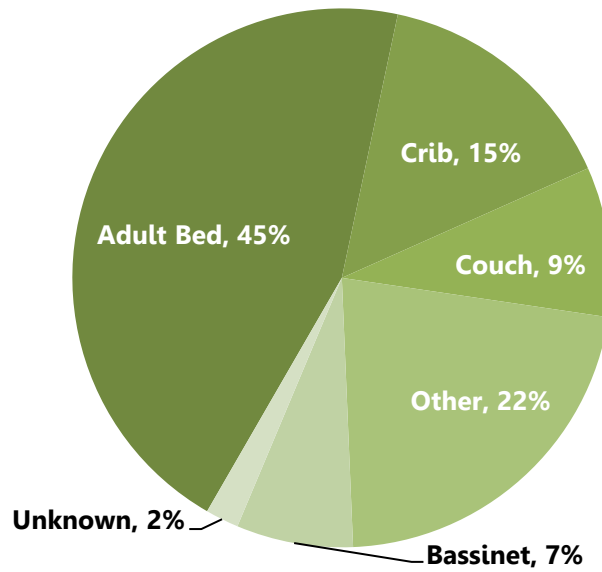
*(Source: Centers for Disease Control and Prevention, Breastfeeding Recommendations and Benefits, updated November 4, 2019)*

## Sleep-Related Infant Death Factors

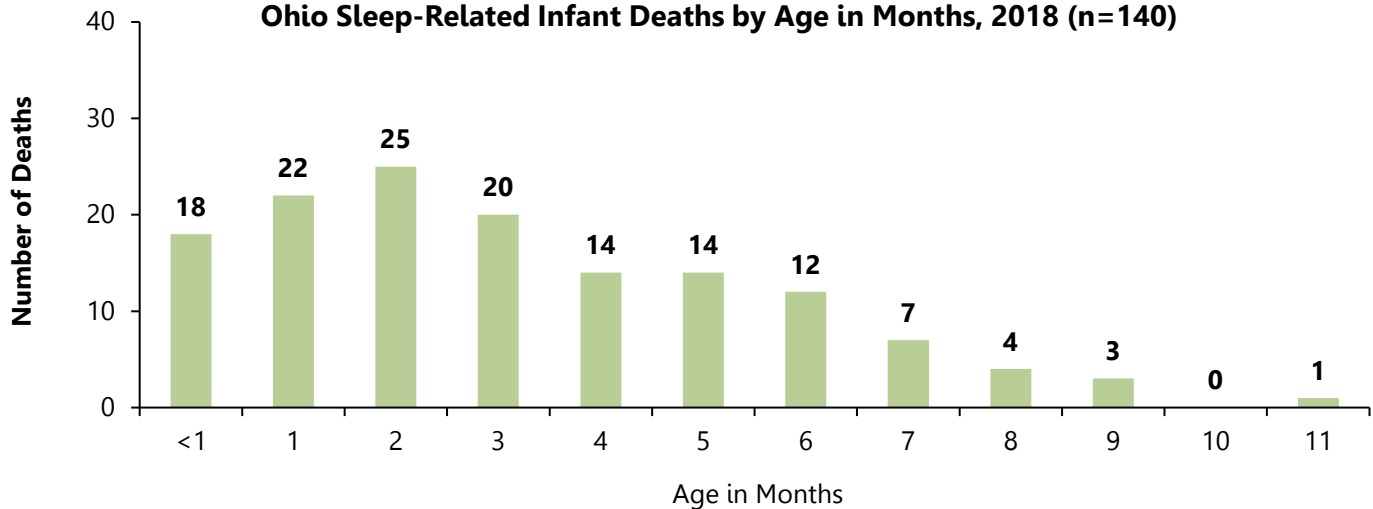
The following charts show the percentage of Ohio infant deaths by location when the infant was found and the age of infant at time of death.

- More than two-fifths (45%) of the sleep-related infant deaths in Ohio were found in an adult bed.
- Nearly half (48%) of the sleep-related deaths involved infants between one month and three months old.

**Ohio Sleep-Related Infant Deaths by Incident Location, 2018 (n=140)**



**Ohio Sleep-Related Infant Deaths by Age in Months, 2018 (n=140)**

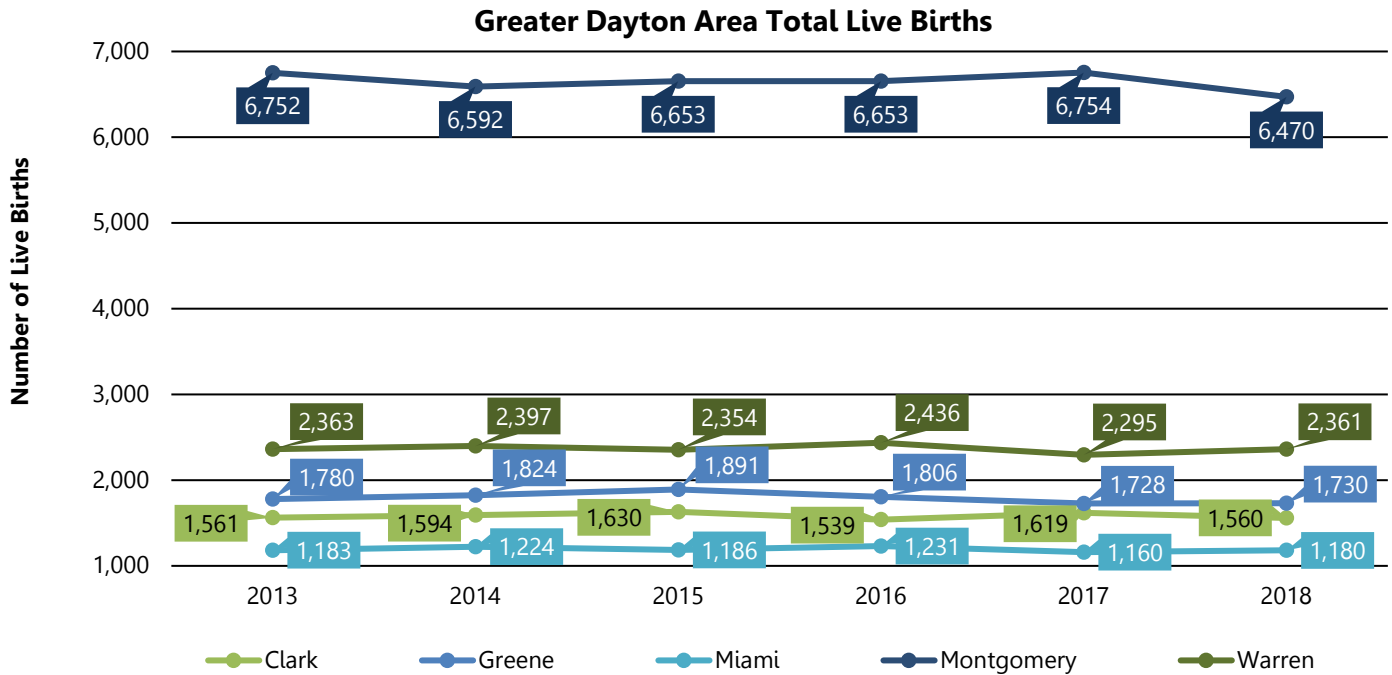


(Source for graphs: Ohio Department of Health, Ohio Child Fatality Review, 2018 Annual Report)

## Pregnancy Outcomes

The following graph show the number of live births in the Greater Dayton Area. \*Please note that the pregnancy outcomes data included all births to adults and adolescents.

- From 2013 to 2018, there was an average of 6,646 live births per year in Montgomery County, as compared to an average of 1,194 births per year in Miami County.



(Source: ODH Information Warehouse Updated 1/12/2020)

Child 0-5 Comparisons	Dayton 2020 Ages 0-5 (n=42)	Outside of Dayton 2020 Ages 0-5 (n=61)	Greater Dayton Area 2017 Ages 0-5	Greater Dayton Area 2020 Ages 0-5	Ohio 2017/18 Ages 0-5	U.S. 2017/18 Ages 0-5
<b>Never breastfed their child</b>	15%	17%	30%	16%	20%	20%
<b>Parent read to child every day (in the past week)</b>	31%	37%	35%	34%	44% <sup>±</sup>	37% <sup>±</sup>

<sup>±</sup> NSCH includes parent or other family member read to child

# Middle Childhood (Ages 6 to 11)

## Key Findings

*The following information was reported by Greater Dayton Area parents of 6 to 11 year olds. Nine percent (9%) of parents felt their child was not safe at school due to fear of bullying. Twenty-eight percent (28%) of parents reported their child was bullied at some time in the past year. Ninety-two percent (92%) of parents reported their child participated in extracurricular activities in the past year. Eighty percent (80%) of parents reported their child exercised, played a sport, or participated in physical activity for at least 60 minutes on three or more days per week.*

## Middle Childhood

- Greater Dayton Area children were enrolled in the following types of schools: public (80%), private (14%), home-schooled (6%), and charter (including digital academies) (<1%).
- Parents felt their child was not safe at school due to the following reasons: fear of bullying (9%), afraid of other kids who show unusual behavior (4%), buildings are not secure (2%), drug/alcohol activity (1%), bomb threats (1%), and gangs (<1%).
- Ninety-two percent (92%) of parents reported their child participated in extracurricular activities in the past year. Their child participated in the following: a sport or sports lessons after school or on weekends (76%); any clubs or organizations after school or on weekends (41%); community service or volunteer work at school, church, or in the community (33%); other organized activities or lessons such as music, dance, language or other arts (30%); and paid work, including regular jobs as well as babysitting, cutting grass, or other occasional work (7%).
- Sixty percent (60%) of parents reported their child participated in more than one extracurricular activity in the past year.
- Eighty percent (80%) of parents reported their child exercised, played a sport, or participated in physical activity for at least 60 minutes on three or more days per week. More than one-third (36%) were physically active on five or more days, and 21% were physically active for at least 60 minutes every day per week. Two percent (2%) of parents reported their child did not engage in any physical activity in the past week.
- More than one-quarter (28%) of parents reported their child was bullied in the past year. The following types of bullying were reported:
  - 22% were verbally bullied (teased, taunted or called harmful names)
  - 11% were indirectly bullied (spread mean rumors about or kept out of a “group”)
  - 6% were physically bullied (they were hit, kicked, punched or people took their belongings)
  - 2% were cyber bullied (teased, taunted, or threatened by e-mail, cell phone, or other electronic methods)
  - 1% were sexually bullied (had nude or semi-nude pictures used to blackmail, intimidate, exploit, or pressure them to have sex when they did not want to)
  - 3% of parents reported they did not know if their child was bullied

*Greater Dayton Area Parents indicated that on most days, their child arrived and left school via the following:*

	School Bus	Family Vehicle	Carpool	Walk	Bike	Public Transit	Other
<b>Arrived at School</b>	56%	37%	3%	3%	1%	0%	1%
<b>Left School</b>	60%	32%	1%	5%	1%	1%	1%



- In the past year, children missed school due to the following: illness or injury (81%), medical appointments (51%), behavioral health/mental health issues (3%), asthma (3%), felt unsafe at school (1%), school suspension (1%), transportation (1%), and to see a tutor (1%).
- More than one-fifth (21%) of parents reported their child had a social media or other virtual network account. Of those who had an account, they reported the following:
  - They had their child’s password (81%)
  - They knew all of the people in their child’s “my friends” (66%)
  - Their child’s account was checked private (47%)
  - Their child’s friends have the password (2%)
- Parents reported their child spent the following unsupervised time after school on an average school day: no unsupervised time (72%), less than one hour (18%), one to two hours (9%), and three to four hours (1%).
- Parents reported they had contacted the following agencies to help with problems concerning their child: child’s school (16%), mental health agency (11%), health department (3%), faith-based agency (1%), legal services/Legal Aid (1%), court (1%), law enforcement (1%), and Children’s Services (1%). One percent (1%) of parents reported they needed services but did not know who to contact. Seventy-seven percent (77%) of parents reported they have never called an agency for help with their child.
- Greater Dayton Area parents discussed the following topics with their child:
  - Screen time (tv or computer) (90%)
  - Eating habits (85%)
  - Bullying/violence (75%)
  - Cyber/Internet safety (64%)
  - Body image (59%)
  - Cultural sensitivity (55%)
  - Negative effects of tobacco (55%)
  - Firearm/gun safety (49%)
  - Negative effects of alcohol (43%)
  - Negative effects of marijuana and other drugs (37%)
  - Negative effects of heroin/opiates (34%)
  - Refusal skills (30%)
  - Respect for gender identity/sexual orientation (30%)
  - Dating and positive relationships (22%)
  - Prescription drug misuse (20%)
  - Abstinence and how to refuse sex (14%)
  - Birth control (7%)
  - Condoms/safer sex/STD prevention (4%)
- One percent (1%) of parents reported they did not discuss any of the above topics with their child.

*Greater Dayton Area parents believed that teaching the reproductive systems, abstinence and refusal skills, and birth control/the use of condoms should be taught in the following grades:*

	Grades K-2	Grades 3-5	Grades 6-8	Grades 9-12	Should not be taught at all
<b>Reproductive System</b>	3%	28%	27%	3%	0%
<b>Abstinence and Refusal Skills</b>	7%	12%	33%	6%	0%
<b>Birth Control and the Use of Condoms</b>	<1%	3%	31%	23%	4%

Child 6-11 Comparisons	Dayton 2020 Ages 6-11 (n=95)	Outside of Dayton 2020 Ages 6-11 (n=128)	Greater Dayton Area 2017 Ages 6-11	Greater Dayton Area 2020 Ages 6-11	Ohio 2017/18 Ages 6-11	U.S. 2017/18 Ages 6-11
<b>Child participated in one or more activities</b> (in past year)	88%	94%	N/A	92%	78%	78%
<b>Child did not miss any days of school because of illness or injury</b>	23%	16%	13%	19%	28%	29%
<b>Did not engage in any physical activity</b> (during the past week)	3%	2%	N/A	2%	7%	6%

N/A- Not Available

### Physical Activity Among School-Aged Children and Adolescents

- **Recommendations:**

- It is important to provide young people opportunities and encouragement to participate in physical activities that are fun, enjoyable, and appropriate for their age group. Children and adolescents aged 6 through 17 should participate in 60 minutes of moderate-to vigorous physical activity daily

- **Benefits:**

- Regular physical activity among children improves fitness, builds strong bones and muscles, controls weight, reduces symptoms of anxiety and depression, and reduces the risk of developing health conditions such as heart disease, cancer, and type 2 diabetes
- Students who are physically active tend to have better grades, school attendance, cognitive performance, and classroom behaviors

- **Consequences of Physical Inactivity:**

- Increases the risk of becoming overweight or obese
- Increases the risk for developing type 2 diabetes
- Increases the risk for cardiovascular disease
- Leads to low bone density

*(Source: Centers for Disease Control and Prevention, Breastfeeding Recommendations and Benefits, updated November 4, 2019)*

# Social Drivers of Health

## Key Findings

Nearly half (47%) of parents reported they had a firearm in or around their home, decreasing to 32% of those with incomes less than \$25,000. Twelve percent (12%) of parents experienced food insecurity in the past year. Eight percent (8%) of children experienced two or more adverse childhood experiences in their lifetime.

## Healthy People 2020

- Healthy People 2020 developed five key social drivers as a “place-based” organizing framework. These five drivers include:
  - Economic stability
  - Education
  - Social and community context
  - Health and health care
  - Neighborhood and built environment

(U.S. Department of Health and Human Services, [Healthypeople.gov](https://www.healthypeople.gov), *Social Determinants of Health*, 4/21/20)



## Current State of Children’s Health as Seen Through Key Community Partners – Social Drivers of Health (SDoH)

- To better understand the state of children’s health through the eyes of the community, community partners interviews were conducted with leaders that serve the youth population in the Greater Dayton area. Some key themes were discovered that influence the health of children in Dayton.
- Three major SDoH were discussed by most of the interviewees that have the biggest impact on children in the Greater Dayton Area:
  - Poverty, often seen as a root cause of poor health, leads to many problems like poor housing, food insecurity, transportation problems and difficulty affording medical care.
    - *“Poverty is definitely one that impacts a lot of the families that we serve.”* - Rhonda Merces, ECHO (Empowering Children with Hope and Opportunity)
  - Food access was a critical issue discussed. Parts of Dayton are known to be food deserts where people do not have easy access to healthy foods, this can result in health problems like obesity.
    - *“Dayton’s Westside Healthy food access continues to be an ongoing challenge, from the ability to get around and connect to any of the grocery stores.”* - Nate Arnett, Five Rivers Metroparks
  - Transportation access has also been a problem. There is a public transportation system in place however the routes are not always accessible. Public transportation can also be a challenge in an emergency like picking a sick child up from school early.
    - *“It’s not easy for them (parents) to get transportation or they have to rely on others for transportation to go pick up their student or to take him to the doctor if they have a bad earache.”* - Dawn Abbott, Dayton Public Schools

(Source: Dayton Children’s Hospital, *Current State of Children’s Health as Seen Through Key Community Partners*, 2020)

## Economic Stability

- In the past year, parents reported someone in their family had to quit a job, not take a job or greatly change jobs because of the following problems concerning child care for their child: could not afford child care (5%), severe behaviors (1%), child was medically fragile (<1%), physical disability (<1%), and their child was removed from day care (<1%).
- In the past year, 21% of parents reported that someone in the household received the following: free or reduced cost breakfast or lunches at school (11%), SNAP/food stamps (7%), mental health/substance abuse treatment (6%), benefits from WIC program (3%), Help Me Grow (3%), federal benefits (2%), cash assistance from a welfare program (1%), Head Start/Early Head Start (1%), and subsidized child care through Greater Dayton Area JFS (1%).
- Parents reported the following percent of their household income goes to their housing: less than 30% (61%), 30%-50% (23%), 50% or higher (7%), and don't know (9%).
- Parents reported their child had moved to a new address:
  - One time (32%)
  - Two times (11%)
  - Three or more times (12%)

## Food Insecurity

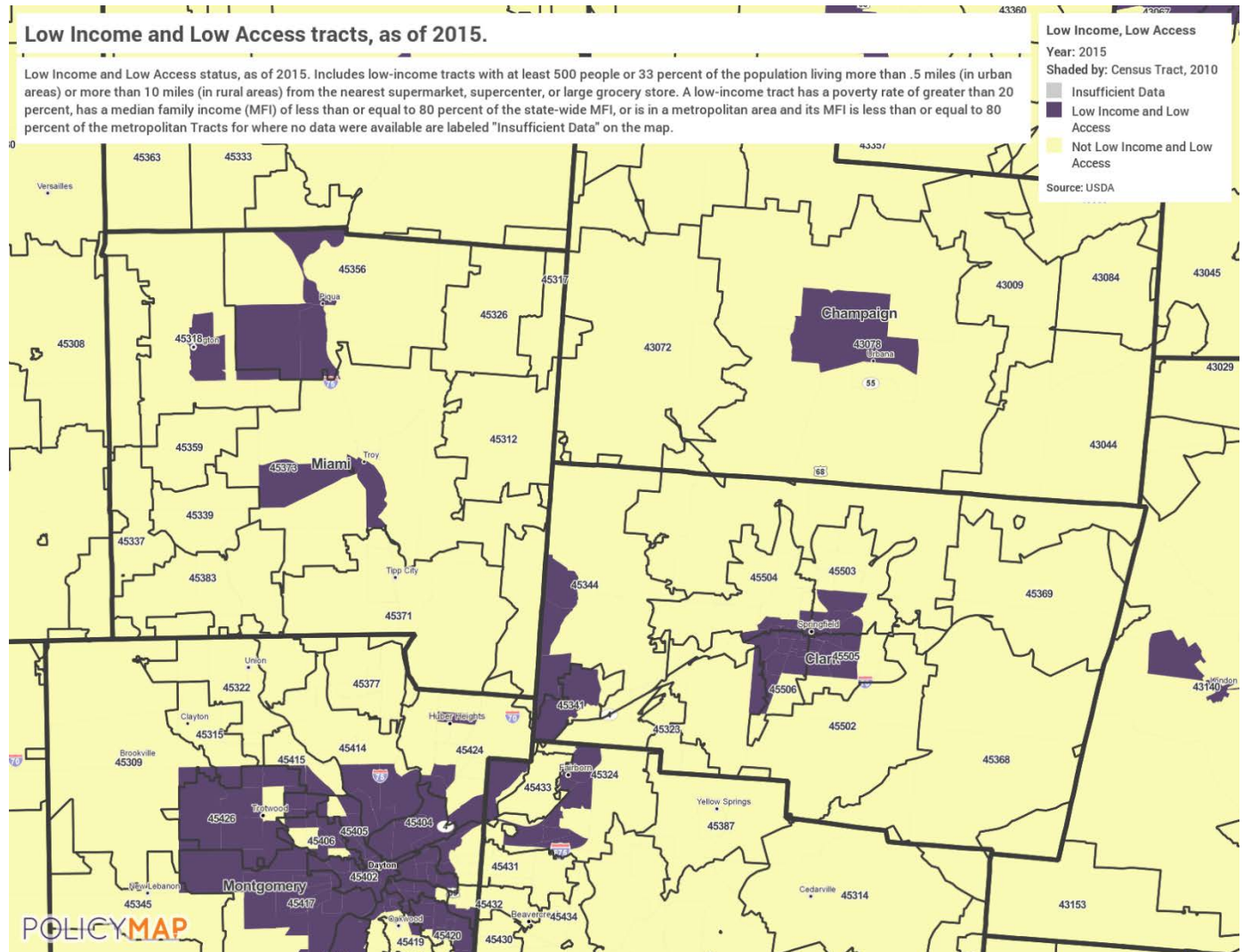
- Twelve percent (12%) of Greater Dayton Area parents reported experiencing any of the following issues in the past year:
  - They had to choose between paying bills and buying food (8%)
  - They worried food would run out before they got money/food stamps to buy more (6%)
  - Loss of income led to food insecurity issues (4%)
  - They went hungry/ate less to provide more food for their family (4%)
  - Their food assistance was cut (3%)
  - They were hungry, but did not eat because they did not have money for food (1%)
- Eight percent (8%) of parents experienced more than one type of food insecurity, increasing to 48% of parents with incomes less than \$25,000.

### Food Insecurity

- The following are the child food insecurity rates for counties within the Dayton Children's Hospital service area in 2017:
  - 21.3% in Clark County or approximately 6,590 children
  - 18.3% in Greene County or approximately 6,280 children
  - 17.4% in Miami County or approximately 4,190 children
  - 21.6% in Montgomery County or approximately 25,700 children
  - 14.6% in Warren County or approximately 8,400 children

*(Source: Feeding America and Map the Meal Gap. Child Food Insecurity in Ohio by County, 2017)*

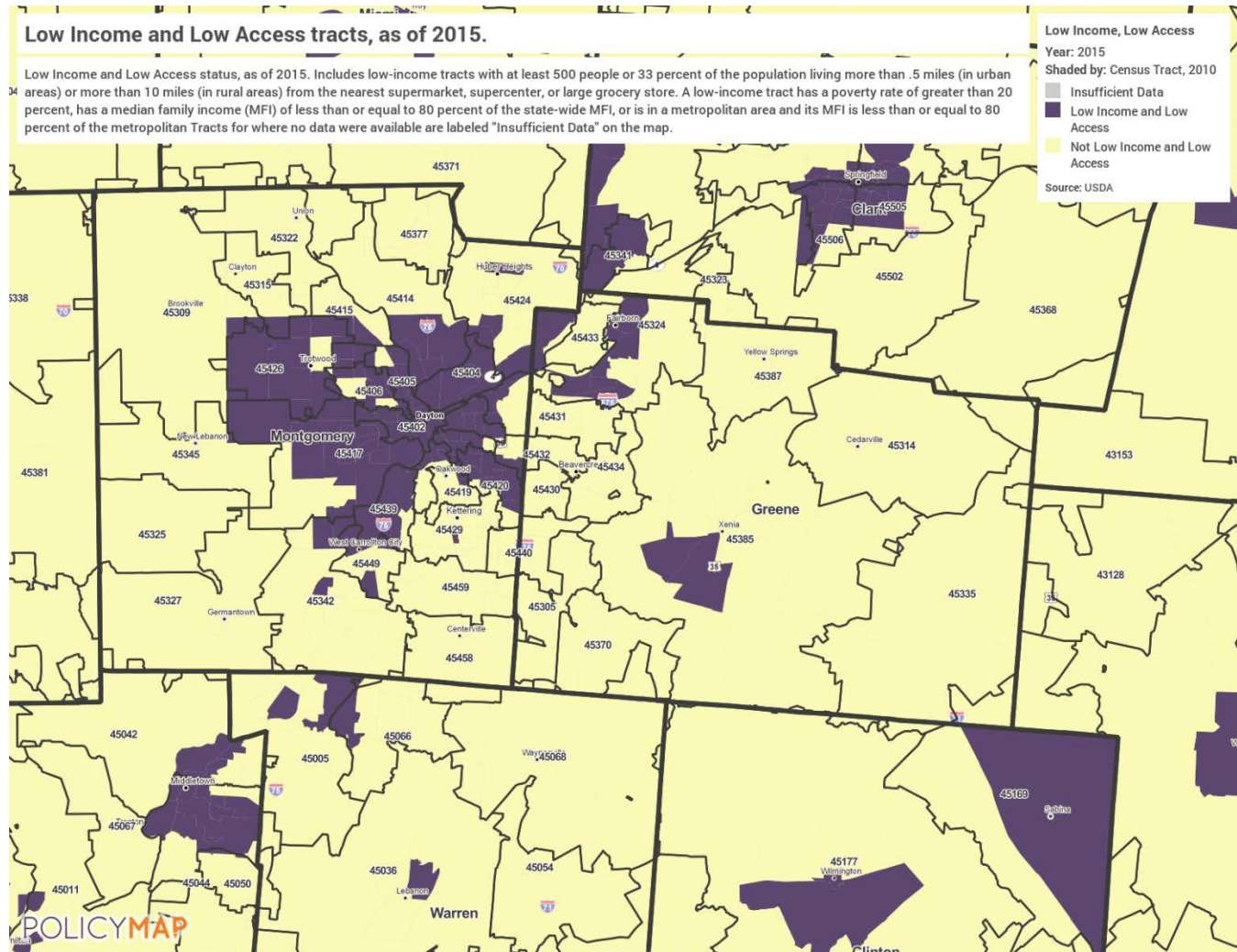
## Food Insecurity - Miami County and Clark County



Source of Food Insecurity Maps: United States Department of Agriculture and Economic Research Services (ERS/USDA). Food Access Research Atlas 2015. PolicyMap. <https://plcy.mp/Fz2GPKy> (02 March 2020).



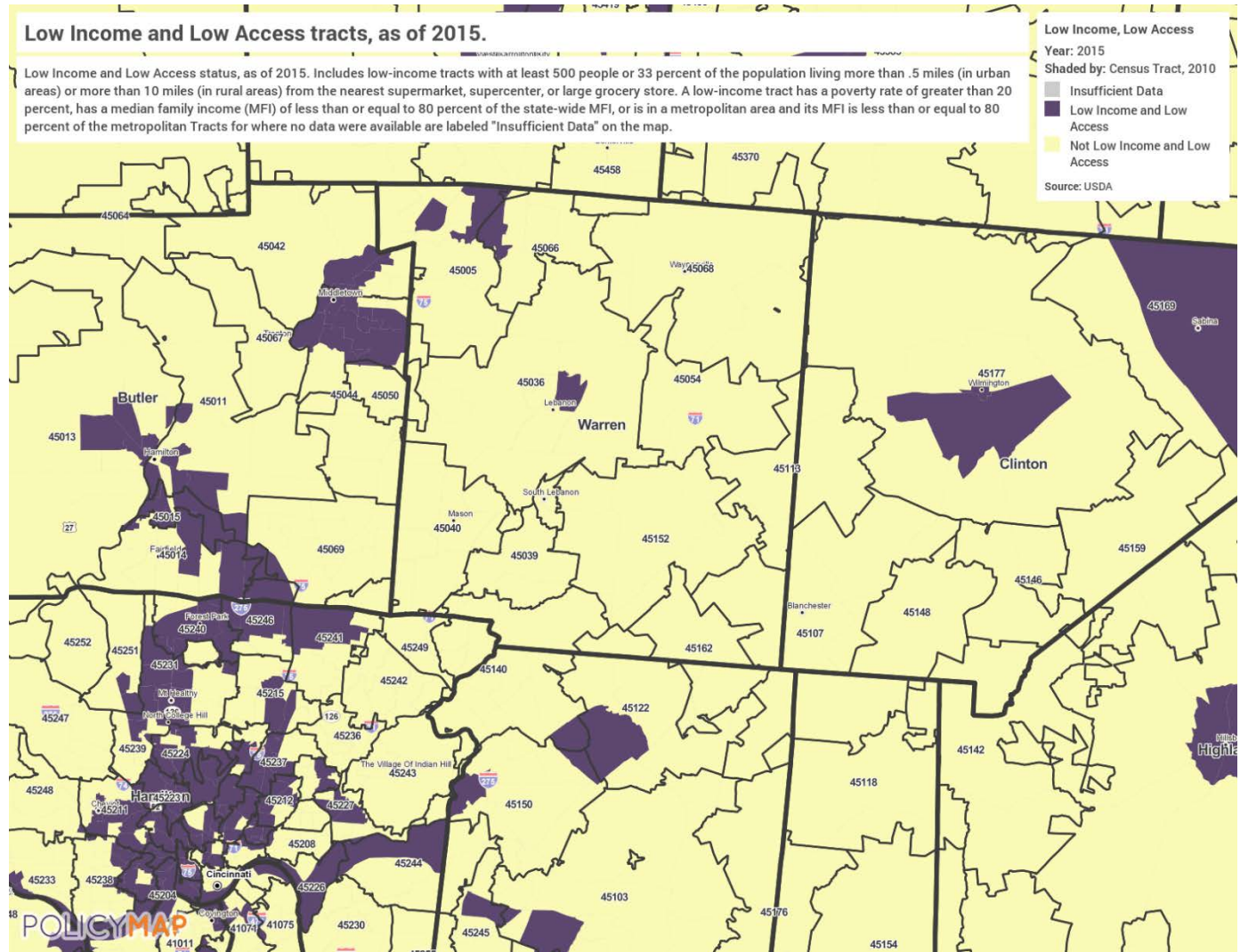
## Food Insecurity – Montgomery County and Greene County



Source of Food Insecurity Maps: United States Department of Agriculture and Economic Research Services (ERS/USDA). Food Access Research Atlas 2015. PolicyMap. <https://plcy.mp/Bf9jBSF> (02 March 2020).



## Food Insecurity – Warren County



Source of Food Insecurity Maps: United States Department of Agriculture and Economic Research Services (ERS/USDA). Food Access Research Atlas 2015. PolicyMap. <https://plcy.mp/7Nnrth> (02 March 2020).

## Social Drivers of Health: Economic Stability

---

Poverty significantly overlaps other known social drivers of health to impact child health disparities. Employment provides income that allows guardians to make choices about factors such as childcare, housing, education, food, and medical care which will all influence the overall health of a child. Medical bills, expenses and debt negatively impact the economic stability of a household. Access to better schools, healthy foods, health care, and transportation are conditions those in more affluent communities enjoy, leaving minority and low-income populations struggling to meet social drivers of health.

Statistics to consider:

- 48.2% of children in the city of Dayton live at or below the federal poverty level<sup>1</sup>
- Per the 2014 US Census data, an estimated 42.9% lived in households that were designated as “poor, near poor, or low income”<sup>2</sup>
- Poverty affects 37% of all children at some point during their childhood<sup>2</sup>
- 5.3 million children were affected by home foreclosures between 2007 and 2010<sup>2</sup>
- Children’s sick days increased, and parent-reported child health status decreased remarkably after the stock market crash of 2008<sup>3</sup>
- 9% of children in Dayton have asthma compared with 7% in the U.S. overall<sup>4</sup>

There have been studies that show that poverty influences birth weight, infant mortality, nutrition, language development, injury and chronic illness.<sup>2</sup> Poor economic stability has been shown to increase stress. There is research that shows this toxic stress associated with poverty may change brain function and can lead to chronic heart problems, autoimmune conditions and psychiatric disorders.<sup>2</sup> Children in poverty are at increased risk for behavioral problems including inattention, impulsivity, and poor peer relationships.<sup>2</sup> Financial stability provides both general and specific benefits to children. Basic needs such as food, housing and transportation are more dependable, leading to reduced stress in the child.<sup>2</sup>

Strategies for addressing economic stability:

- Increase awareness of Earned Income Tax Credit (EITC)
- Create additional state-funded tax credits
- Adapt a pediatric medical home model in health centers
- Engage community partners in safety net programs for children in poverty

---

<sup>1</sup> Duffee, James. Pediatric Care of Children in Poverty. Pediatric Forum. August 2017. <https://www.childrensdayton.org/the-hub/research/pediatric-care-children-poverty>

<sup>2</sup> AAP COUNCIL ON COMMUNITY PEDIATRICS. Poverty and Child Health in the United States. Pediatrics. 2016; 137 (4):e20160339

<sup>3</sup> Health Affairs Culture of Health. Health Policy Brief: The Earned Income Tax Credit, Poverty, and Health. October 2008.

<sup>4</sup> Public Health Dayton and Montgomery County. (2019, September). Community Health Assessment 2019. Public Health Dayton and Montgomery County. <https://www.phdmc.org/agency-publications/1290-2019-cha/file>

## Social Drivers of Health: Food Security

---

Food security is an important social driver of health and has a large impact on the overall health of children in the community. It can be affected by multiple factors like income, employment, race/ethnicity, and disability. Children who do not have enough food are at higher risk for both negative health and behavioral outcomes.

Statistics to consider:

- Children experiencing hunger are more likely to repeat grade school, experience more impairments in areas like language and motor skills, have more social and behavioral problems and higher risk of asthma and anemia<sup>5</sup>
- 84% of households that Feeding America services report buying the cheapest food and not the healthiest foods<sup>1</sup>
- Women who have access to SNAP during pregnancy have fewer low birth weight babies<sup>2</sup>
- 19.6% of children in Ohio are food insecure<sup>1</sup>
- In 2017, 17% of people living in Montgomery County were food insecure and 21.6% of children in Montgomery County were food insecure<sup>1</sup>

Nutrition is important to health and encompasses the amount and types of foods people consume. Poor nutrition and physical inactivity can result in obesity, heart disease, diabetes, and types of cancer later in life. Good nutrition habits start when people are children and can set people up for a lifetime of good health or poor health depending on the habits they form. In 2017 19.6% of children in Ohio<sup>1</sup> were food insecure, or they had a disruption in food intake because of lack of resources. The other aspect of food and nutrition is ensuring a healthy diet that consists of fresh fruits and vegetables. Poor diet and food insecurity can lead to a lifetime of health and behavioral problems as well as schooling issues. This means addressing food insecurity and poor nutrition will have a significant impact on the health of children in the community in the long run and needs to be addressed.

Strategies for addressing food security:

- School-based obesity prevention interventions
- Food pharmacies
- Cooking classes

---

<sup>5</sup> Facts About Child Hunger in America | Feeding America. <https://www.feedingamerica.org/hunger-in-america/child-hunger-facts>. Accessed February 7, 2020.

<sup>2</sup> Carlson S, Rosenbaum D, Keith-Jennings B, Nchako C. SNAP Works for America's Children. :26.

<sup>3</sup> Child Food Insecurity in Montgomery County | Feeding America. <https://map.feedingamerica.org/county/2017/child/ohio/county/Montgomery>. Accessed April 10, 2020.

## Education

- The primary language spoken in children’s homes was English (100%).
- Please reference the early and middle childhood sections for further education information.

## Social Drivers of Health: Education

---

Education is an essential part of child health, influencing future outcomes and opportunities. A quality education is the baseline for a productive future and creates the citizens and workers of the next generation. The connection between income and education in the United States influences a disproportionate system that provides greater opportunities for those in more affluent areas, leaving children in low-income neighborhoods with fewer options. This discrepancy in quality of education leads to important health impacts in a child’s life.

The first five years of life is when 90% of a child's brain develops and is critical for language skills<sup>6</sup>. When children start school behind, they tend to stay behind<sup>7</sup>. In Montgomery County, only 33% of children are kindergarten ready<sup>8</sup> compared to 41% across the state of Ohio<sup>2</sup>. These important stages of early development and kindergarten readiness are tied to later milestones such as third grade reading, eight grade math, and even high school graduation<sup>1</sup>.

Statistics to consider:

- Fewer than 20% of mothers in Montgomery County have a college degree<sup>3</sup>
- 51% of students in Dayton Public schools are living in dire poverty<sup>9</sup>
- Only 26% of economically disadvantaged children demonstrate kindergarten readiness<sup>2</sup>
- Dayton Public Schools have only a 72% high school graduation rate<sup>10</sup>

Ensuring quality education for all students is an essential step for investing in the future. Students today will be the workforce of tomorrow and. All children deserve the opportunity to overcome poverty and other negative implications through advancing education. Healthy children are well-educated ones who can navigate life effectively.

Strategies for addressing education:

- Increase wraparound services in low-income school districts
- Promote early learning and literacy programs
- Increase home-visiting programs in zip codes with greatest need

---

<sup>6</sup> Health Policy Institute of Ohio. (2017, October). *Health Policy Brief: Connections Between Education and Health, The Importance of Early Learning*. Health Policy Institute of Ohio. [https://www.healthpolicyohio.org/wp-content/uploads/2018/08/PolicyBrief\\_EducationAndHealth\\_No.-3-8.6.18-update.pdf](https://www.healthpolicyohio.org/wp-content/uploads/2018/08/PolicyBrief_EducationAndHealth_No.-3-8.6.18-update.pdf)

<sup>7</sup> Groundwork Ohio. (2020, February 14). *Early Literacy: A Foundation for Lifelong Learning*. Groundwork Ohio.

[https://2d94f3a3-3d74-4931-8fd2-5e91fb54da89.filesusr.com/ugd/d2fbfd\\_c76e773620a843189f1718ab8e86ee3e.pdf](https://2d94f3a3-3d74-4931-8fd2-5e91fb54da89.filesusr.com/ugd/d2fbfd_c76e773620a843189f1718ab8e86ee3e.pdf)

<sup>8</sup> Learn to Earn Dayton. (2018, November). *Recommendations Report: Birth to 3*. Learn to Earn Dayton. <https://www.learntoearnadayton.org/research>

<sup>9</sup> Learn to Earn Dayton. (2018). *School District Data: Dayton Public Schools*. Learn to Earn Dayton. [https://d7220025-00c0-4f65-9303-83fbaf2465b8.filesusr.com/ugd/a395ee\\_f18cd0a25a074c8d910627fbc0a7da81.pdf](https://d7220025-00c0-4f65-9303-83fbaf2465b8.filesusr.com/ugd/a395ee_f18cd0a25a074c8d910627fbc0a7da81.pdf)

<sup>10</sup> Dayton Public Schools. (2017). 2017 ODE State Report Card Results: District Graduation Rates. Dayton Public Schools. <https://www.dps.k12.oh.us/content/documents/District-Graduation-Rates-2.pdf>

## Health and Health Care

- Please reference the health and functional status, health care access, and early and middle childhood sections for further health and health care information.

## Social Drivers of Health: Health Care System

---

Access to health care is an important driver of child health and wellbeing. Obstacles in the health care system can keep children from getting the medical care they need, thus leading to negative short- and long-term impacts. From quality of care to providers and insurance, many different factors can keep children from experiencing appropriate and quality medical care.

Ohio faces significant gaps in health and quality of care. Clinical care accounts for about 20 percent of all factors that can influence one's health, making it an essential piece of child wellness<sup>11</sup>. In Montgomery County, more than 10 percent of the population reported that they did not see a doctor because of the cost and 8 percent are uninsured<sup>4</sup>. Furthermore, disparities in education and job attainment among race and high poverty areas lead to uneven access to health care and insurance coverage<sup>2</sup>.

Statistics to consider:

- 4% of children in Montgomery County are uninsured<sup>12</sup>
- Only 55% percent of children in Montgomery County received a flu vaccine in 2017<sup>2</sup>
- Approximately 1.2 million children in Ohio are enrolled in Medicaid coverage<sup>3</sup>
- Ohio ranks 46th out of 50 states in health value<sup>13</sup>

The health care system determinant must be addressed in order to improve the quality of care and health equity for the whole population. Children who do not receive proper medical care are more likely to face poor outcomes in the future, thus incurring higher medical costs down the line.

Strategies for addressing the health care system:

- Provide incentives for medical care providers in low-income areas
- Invest in school-based health programs
- Invest in community preventative care programs

---

<sup>11</sup> Health Policy Institute of Ohio. (2018, October). *Health Policy Brief: Closing Ohio's Health Gaps, Moving Towards Equity*. Health Policy Institute of Ohio. [https://www.healthpolicyohio.org/wp-content/uploads/2018/10/PolicyBrief\\_Equity.pdf](https://www.healthpolicyohio.org/wp-content/uploads/2018/10/PolicyBrief_Equity.pdf)

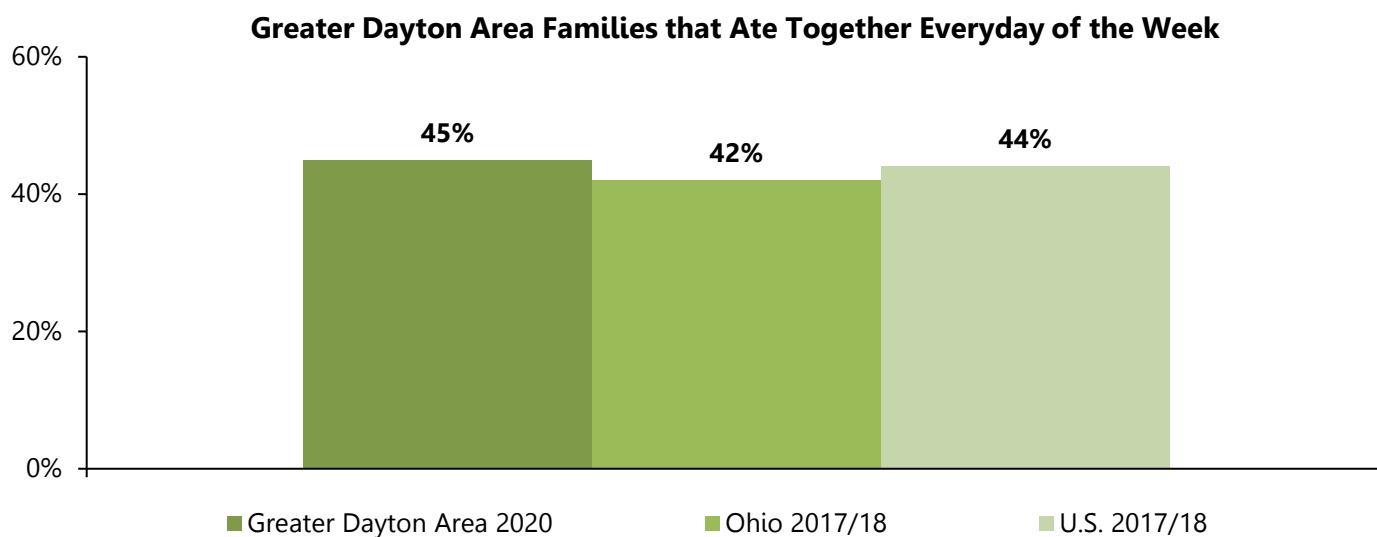
<sup>12</sup> Public Health Dayton and Montgomery County. (2019, September). *Community Health Assessment 2019*. Public Health Dayton and Montgomery County. <https://www.phdmc.org/agency-publications/1290-2019-cha/file>

<sup>13</sup> Health Policy Institute of Ohio. (2018, September). *Assessment of Child Health and Health Care in Ohio*. Health Policy Institute of Ohio. [https://www.healthpolicyohio.org/wp-content/uploads/2018/11/ChildAssessment\\_Snapshot.pdf](https://www.healthpolicyohio.org/wp-content/uploads/2018/11/ChildAssessment_Snapshot.pdf)

## Social and Community Context

- Over half (58%) of parents reported that they or another family member had taken their child on an outing (including the park, library, zoo, shopping, church, a restaurant, or family gatherings) three or more times in the past week, decreasing to 52% of those with incomes less than \$25,000
- Greater Dayton Area parents reported the following forms of discipline they used for their child:
  - Take away privileges (83%)
  - Time out (55%)
  - Yelling (36%)
  - Grounding (33%)
  - Spanking (22%)
  - Wash mouth out (2%)
  - Other methods (7%)
- Four percent (4%) of parents reported their child had not been disciplined.
- More than two-fifths (45%) of parents reported that every family member who lived in their household ate a meal together every day of the week. Families ate a meal together an average of 5.5 times per week.

*The following graph shows the percent of Greater Dayton Area, Ohio, and U.S. families that ate a meal together every day of the week.*

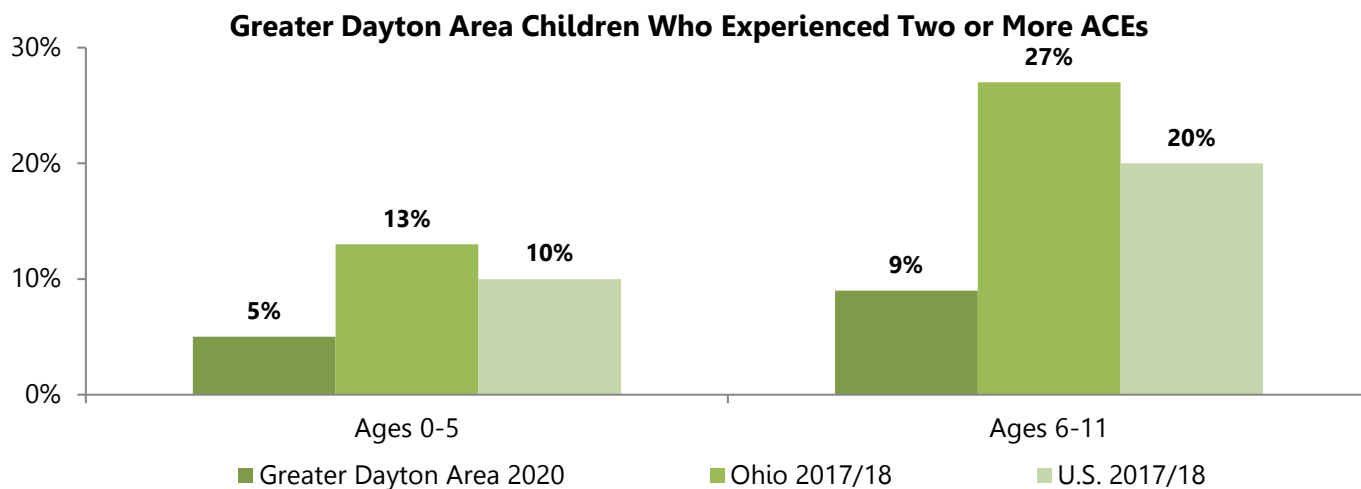


*(Source for graph: 2017/18 National Survey of Children's Health & 2019 Dayton Children's Community Health Needs Assessment)*



- Greater Dayton Area parents reported their child experienced the following adverse childhood experiences (ACEs) in their lifetime:
  - Their parents became separated or were divorced (12%)
  - Lived with someone who was mentally ill or suicidal, or severely depressed (8%)
  - Lived with someone who had a problem with alcohol or drugs (6%)
  - Seen or heard any parents or adults in their home hit, beat, kicked, or physically hurt each other (5%)
  - Lived with a parent/guardian who served time or was sentenced to serve time in prison or jail after they were born (4%)
  - Been the victim of violence or witness violence in their neighborhood (1%)
  - Had a parent/guardian die (1%)
  - Was treated or judged unfairly because his/her ethnic group (1%)
- Eight percent (8%) children experienced two or more adverse childhood experiences in their lifetime.

*The following graph shows the percent of Greater Dayton Area, Ohio, and U.S. children who experienced two or more ACEs in their lifetime.*



*(Source for graph: 2017/18 National Survey of Children's Health & 2019 Dayton Children's Community Health Needs Assessment)*

## Adverse Childhood Experiences

### What are Adverse Childhood Experiences (ACEs)?

- ACEs are potentially traumatic events that occur in childhood (0-17 years). For example: experiencing violence or abuse, witnessing violence, or having a family member attempt or die by suicide. Also included are aspects of the child's environment that can undermine their sense of safety, stability, and bonding such as growing up in a household with substance abuse, mental health problems, or instability due to parental separation.

### What are the consequences?

- ACEs can have lasting, negative effects on health, well-being, and opportunity. These experiences can increase the risks of injury, sexually transmitted diseases, maternal and child health problems, teen pregnancy, and a wide range of chronic diseases and leading causes of death.
- ACEs and associated conditions, such as living in under-resources or racially segregated neighborhoods frequently moving, and experiencing food insecurity, can cause toxic stress. Toxic stress from ACEs can change brain development and affect such things as learning, decision-making, and response to stress.
- Children growing up with toxic stress may have difficulty forming healthy relationships. They also may have unstable work histories as adults and struggle with finances, jobs, and depression later in life.

*(Source: CDC, Violence Prevention, Preventing Adverse Childhood Experiences, December 31, 2019)*

## Social Drivers of Health: Social and Community Context

---

The social and community context driver of health involves social integration, support systems, community engagement, and discrimination. This driver assesses the strength of relationships and sense of solidarity among members of a community. Social networks can spread social capital in terms of perceived fairness, perceived helpfulness, group membership, and trust as well as health behaviors and outcomes. On the opposite side of social integration, discrimination is a socially structured action that is unfair or unjustified and protects more powerful and privileged groups at the detriment of others<sup>14</sup>. Social and community contexts can significantly impact health.

Statistics to consider:

- Black women with higher racial discrimination levels were 2x more likely to deliver low birth weight infants<sup>2</sup>
- Children who live in supportive neighborhoods have lower rates of adverse childhood experiences (two+ ACEs 40.7% compared to 59.3%)<sup>3</sup>
- According to the US Health and Human Services data, in Ohio, 52% percent of children live in neighborhoods with a park, sidewalk, library, and community center. 21% live in neighborhoods that are poorly kept or rundown. However, 82% live in supportive neighborhoods<sup>4</sup>
- Fewer children in nuclear families were considered to be in poor health compared to those in non-nuclear families (12% compared to 22%). They also have lower rates of emergency room use and rates of ADHD (regardless of parents' education, income, or residence)<sup>5</sup>
- In children, interactions between perceived racism and coping responses predicted systolic blood pressure in black children aged 11 years on average<sup>6</sup>

Social support can lead to positive health outcomes. It can help people to stick to healthier diets or exercise routines. It has also been linked to improved cardiovascular outcomes including decreased risk of heart attack or other heart conditions long term<sup>7</sup>. It can act as a barrier against the effects of discrimination if people feel supported by their community in the face of unfair targeting<sup>8</sup>. Social integration and engagement also act as a buffer against adversity or trauma as people have multiple people or organizations to turn to when they face difficulties.

---

<sup>14</sup> HealthyPeople.gov. Social Cohesion. Office of Disease Prevention and Health promotion. <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/social-cohesion>. Last updated 3/27/20.

<sup>2</sup> Sanders-Phillips K, Settles-Reaves B, Walker D, Brownlow J. Social inequality and racial discrimination: Risk factors for health disparities in children of color. *Pediatrics*. 2009 Nov 1;124(Supplement 3):S176-86.

<sup>3</sup> Child and Adolescent Health Measurement Initiative. 2017-2018 National Survey of Children's Health (NSCH) data query. Data Resource Center for Child and Adolescent Health supported by Cooperative Agreement U59MC27866 from the U.S. Department of Health and Human Services, Health Resources and Services Administration's Maternal and Child Health Bureau (HRSA MCHB). Retrieved 03/24/2020 from [www.childhealthdata.org](http://www.childhealthdata.org). CAHMI: [www.cahmi.org](http://www.cahmi.org).

<sup>4</sup> U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau, The Health and Well-Being of Children: A Portrait of States and the Nation, 2011-2012. Rockville, Maryland: U.S. Department of Health and Human Services, 2014.

<sup>5</sup> Anderson J. The impact of family structure on the health of children: Effects of divorce. *Linacre Q*. 2014;81(4):378-387. doi:10.1179/0024363914Z.00000000087

<sup>6</sup> Sanders-Phillips K, Settles-Reaves B, Walker D, Brownlow J. Social inequality and racial discrimination: Risk factors for health disparities in children of color. *Pediatrics*. 2009 Nov 1;124(Supplement 3):S176-86.

<sup>7</sup> Reblin M, Uchino BN. Social and emotional support and its implication for health. *Curr Opin Psychiatry*. 2008;21(2):201-205. doi:10.1097/YCO.0b013e3282f3ad89

<sup>8</sup> HealthyPeople.gov. Discrimination. Office of Disease Prevention and Health promotion. <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/social-cohesion>. Last updated 3/27/20.

Strategies for addressing social and community context:

- Increased access to after school activities
- Improved public health programs to increase knowledge in the community
- Group classes for new parents
- Increased community organizations such as churches and community centers

## Neighborhood and Built Environment

- Parents reported their child was exposed to secondhand smoke (cigarettes, marijuana, etc.) or vaping products in the following places: home (7%), other relative's home (6%), park/ball field (2%), car (2%), friend's home (1%), fairgrounds (1%), and other (2%).
- Parents reported the following reasons they did not feel their neighborhood was safe:
  - Heavy traffic area (7%)
  - Crime (4%)
  - No accessible sidewalks (4%)
  - No place for kids to play (3%)
  - Bullying (2%)
  - Loud/disrespectful noise levels (1%)
  - Gangs (1%)
  - Other (5%)
- Three percent (3%) of parents reported having transportation issues, increasing to 12% of parents with incomes less than \$25,000. Parents reported the following transportation issues: could not afford car repair (2%), could not afford gas (1%), no car (1%), disabled (<1%), cost of public or private transportation (<1%), did not feel safe to drive (<1%), limited public transportation available or accessible (<1%), and other car issues/expenses (1%). Two percent of parents reported two or more transportation issues.
- Greater Dayton Area parents obtained **most** of their food from the following places: large grocery store (88%), local grocery store (3%), garden/grew their own (1%), corner/convenience stores (<1%), mail order food service (<1%), food pantry (<1%), and other places (<1%).
- Parents obtained the **rest** of their food from the following places: large grocery store (34%), local grocery store (34%), garden/grew their own (24%), farmer's market (20%), Dollar General/Dollar Store (9%), corner/convenience stores (5%), mail order food service (5%), food pantry (3%), consumer supported agriculture (2%), veggie mobile/mobile produce (1%), community garden (<1%), and other places (8%).

## Social Drivers of Health: Neighborhood and Physical Environment

---

The physical environment a child grows up in can have a lasting impact on his or her health and development. Neighborhood characteristics such as housing quality, parks, walkability, safety, child care access, and transportation shape this environment and contribute to a healthy upbringing. Minorities and low-income families see the most prominent barriers in these areas, making their children much more likely to see negative health impacts. Specifically, impoverished neighborhoods have older homes and school buildings, leading to health challenges such as greater blood lead levels in children<sup>4</sup>. These and other environmental factors can also contribute to higher rates of asthma in low-income children<sup>4</sup>.

Statistics to consider:

- 14% of all households in 2003 paid 50% or more of their income on housing or experienced other “critical housing needs” which includes living in severe conditions<sup>15</sup>
- Another report states this has increased by 56% since 2003, with 2.6 million households with children having “worst case housing”<sup>2</sup>
- Roughly 150,000 families with 290,000 children spent part of the year 2017 in a homeless shelter<sup>2</sup>
- Parents of children in low-income families are four times as likely as those living above the poverty line to describe their neighborhoods as unsafe<sup>3</sup>
- 20% of families in the U.S. with access to public transportation “did not have a public transportation route to the hospital or emergency room”<sup>4</sup>

Housing instability, homelessness and severe housing conditions have been shown to increase physical health problems such as asthma and increases risk for injuries.<sup>2</sup> Studies show rental assistance has been shown to improve the risk of cognitive and behavioral problems and also improve the risk of hospitalization in childhood. Other hardships such as poverty, overcrowding and food instability are also addressed by increased stability of the patient’s physical environment which would positively impact a child’s health.<sup>1,2</sup>

Strategies for addressing the neighborhood and physical environment:

- Increase childcare subsidies, such as the Child Care and Developmental Block Grant
- Support housing rehabilitation and public housing
- Create additional programs to help low-income families meet their basic needs
- Explore transportation expansion and new routes

---

<sup>15</sup> Vandivere, Sharon et al. Funders’ Network for Smart Growth and Livable Communities. How Housing Affects Child Well-Being. Fall 2006.

<sup>2</sup> Rice, Douglas et al. Center on Budget and Policy Priorities. Child Care and Housing: Big Expenses with Little Help Available. 29 April 2019.

<sup>3</sup> Child Trends. Neighborhood Safety. <https://www.childtrends.org/indicators/neighborhood-safety>. March 2019.

<sup>4</sup> Grant, Roy. The Children’s Health Fund. Transportation as a Barrier to Child Health Access. <https://www.ncbi.nlm.nih.gov/pubmed/24515338>. April 2014.

## Safety Characteristics

Greater Dayton Area parents indicated that their child rode in a car seat, booster seat, or wore a seatbelt at the following frequencies:

Car Seat	Booster Seat	Seat Belt with No Booster Seat
Always (40%)	Always (36%)	Always (42%)
Nearly always (<1%)	Nearly always (4%)	Nearly always (1%)
Sometimes (<1%)	Sometimes (3%)	Sometimes (3%)
Seldom (<1%)	Seldom (3%)	Seldom (2%)
Never (6%)	Never (15%)	Never (9%)
Child is too big for car seat (53%)	Child is over 4'9" and 80 lbs. (18%) OR Child is too small for booster seat (22%)	Child is too small for seat belt with no booster seat (smaller than 4'9" and 80 lbs.) (42%)

Greater Dayton Area parents indicated that their child wore a helmet while riding a bike/scooter, ATV, snowmobile, and skateboard at the following frequencies:

	Bike/Scooter	ATV	Snowmobile	Skateboard
<b>Always wore a helmet</b>	44%	63%	50%	29%
<b>Most of the time wore a helmet</b>	23%	13%	0%	24%
<b>Sometimes wore a helmet</b>	17%	3%	0%	14%
<b>Rarely wore a helmet</b>	5%	0%	0%	19%
<b>Never wore a helmet</b>	11%	21%	50%	14%

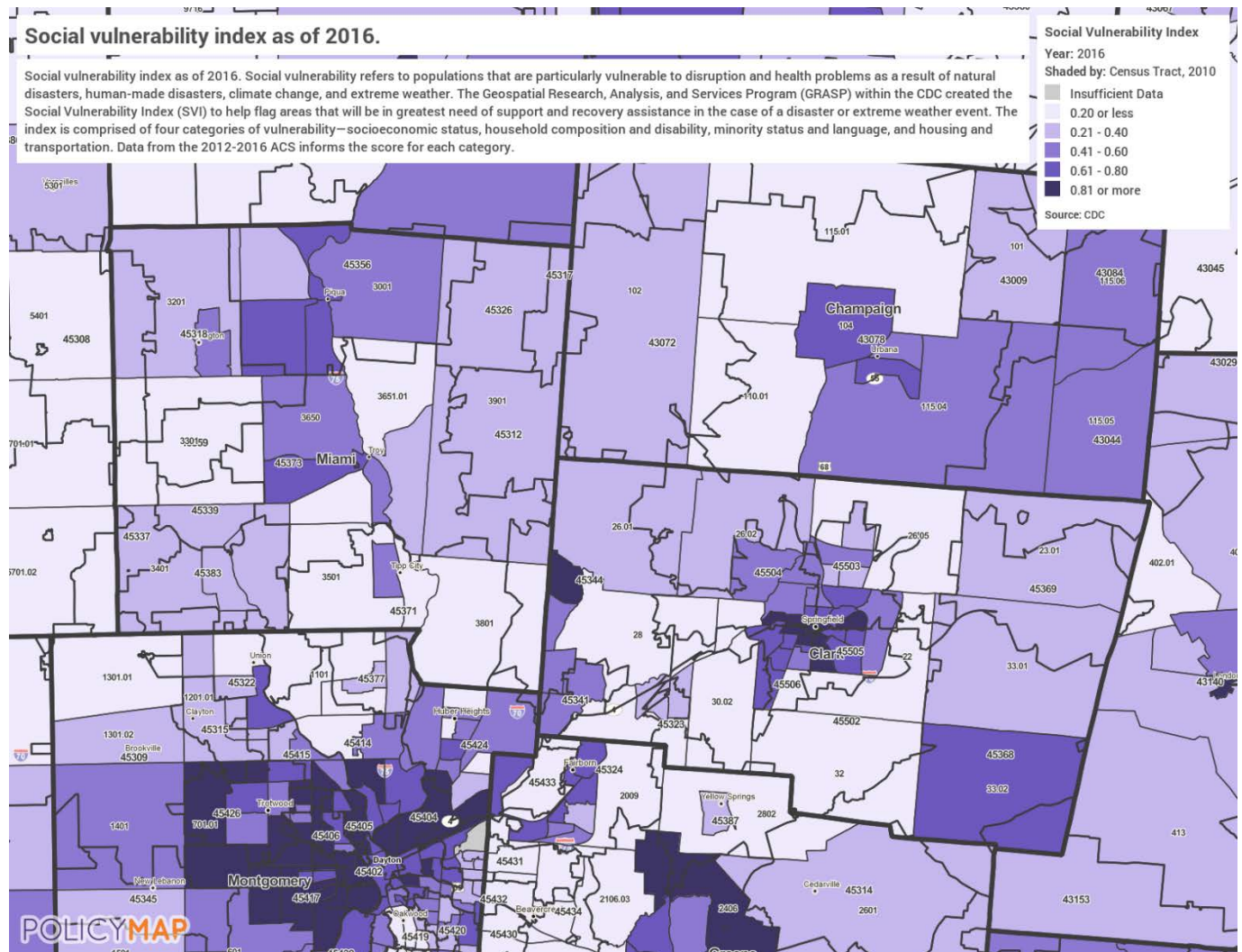
- Nearly half (47%) of parents reported they had a firearm in or around their home, decreasing to 32% of those with incomes less than \$25,000. Less than one percent (<1%) of parents reported they were unlocked/loaded.
- Twelve percent (12%) of parents reported having lingering issues as a result of the May 2019 tornadoes such as: fear of another tornado (6%), unfinished repairs (5%), debt (3%), anxiety (3%), depression (1%), decrease in property values (1%), physical health issues (1%), anger (1%), job loss (<1%), and other issues (1%).

### Caring for Children in a Disaster

- Experiencing a disaster can cause stress for families. Young children are at particular risk for mental health issues. Some children may develop disorders like anxiety, depression, and post-traumatic stress disorder after a disaster. Stress and emotional problems affect children's physical health, quality of life, and how well they do at home, school, and in their communities.
- Parents and caregivers can help children cope by:
  - Giving children the opportunity to talk about what they went through or what they think about it. Encourage them to share concerns and ask questions.
  - Allowing children to be with you or other trusted adults who can help them feel safe, calm, connected, and give them a sense of hope.
  - Limiting exposure to mass media coverage of the disaster and its aftermath.
  - Encouraging children to take action directly relating to the disaster (ex: volunteer in a safe environment). This can help them regain a sense of control and manage their feelings.
- Children may need continued mental health support following a disaster. Consider talking to a professional if the child continues to be very upset for more than 2-4 weeks, the child's problems become worse over time, or the child's reactions affect school or relationships with friends/family.

(Source: Centers for Disease Control and Prevention, *Caring for Children in a Disaster*, updated January 13, 2020)

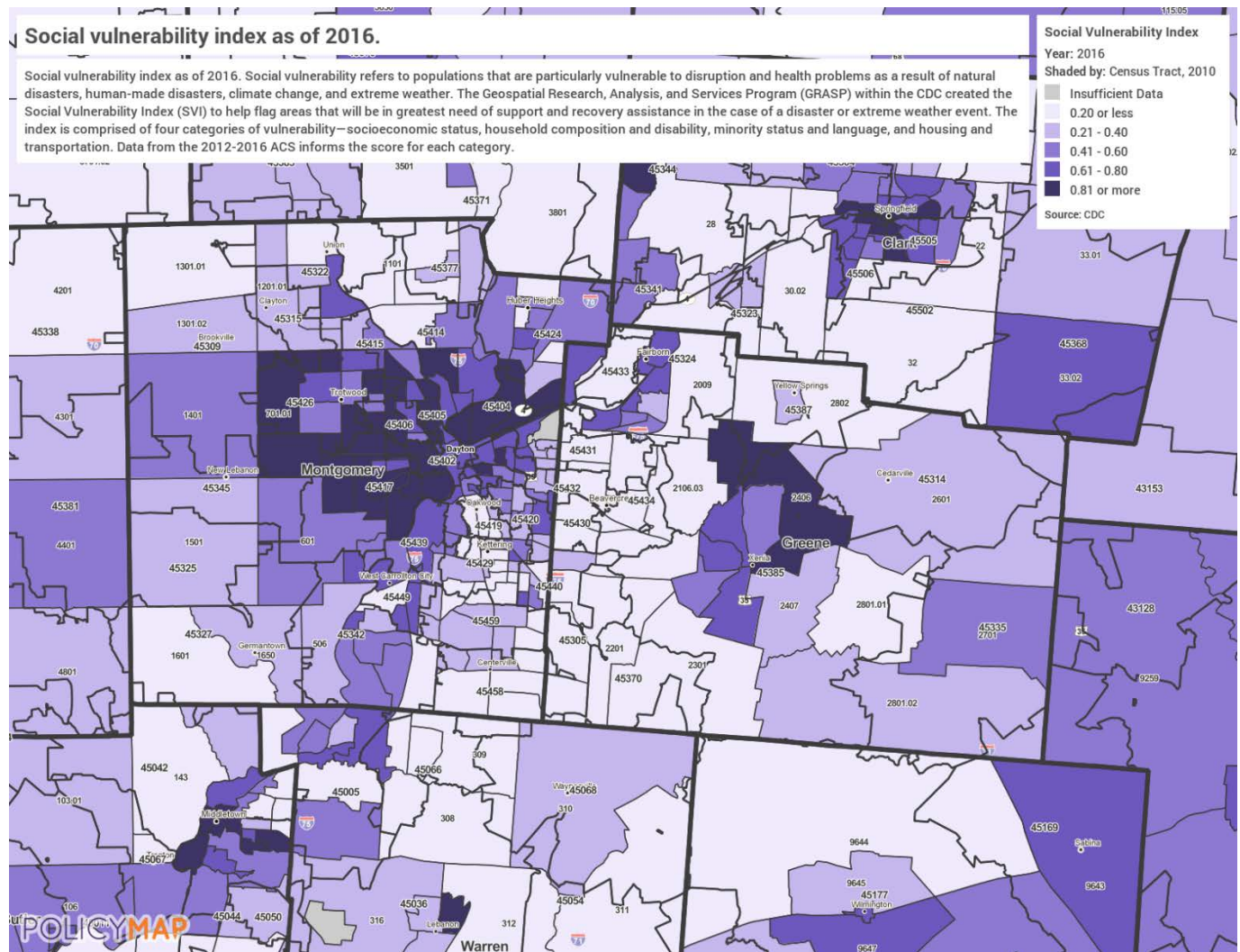
## Social Vulnerability Index – Miami County and Clark County



Source of Social Vulnerability Index: Centers for Disease Control and Prevention (CDC) Social Vulnerability Index (SVI). Social Vulnerability Index 2016. PolicyMap. <https://plcy.mp/n7ZQv38> (13 April 2020).

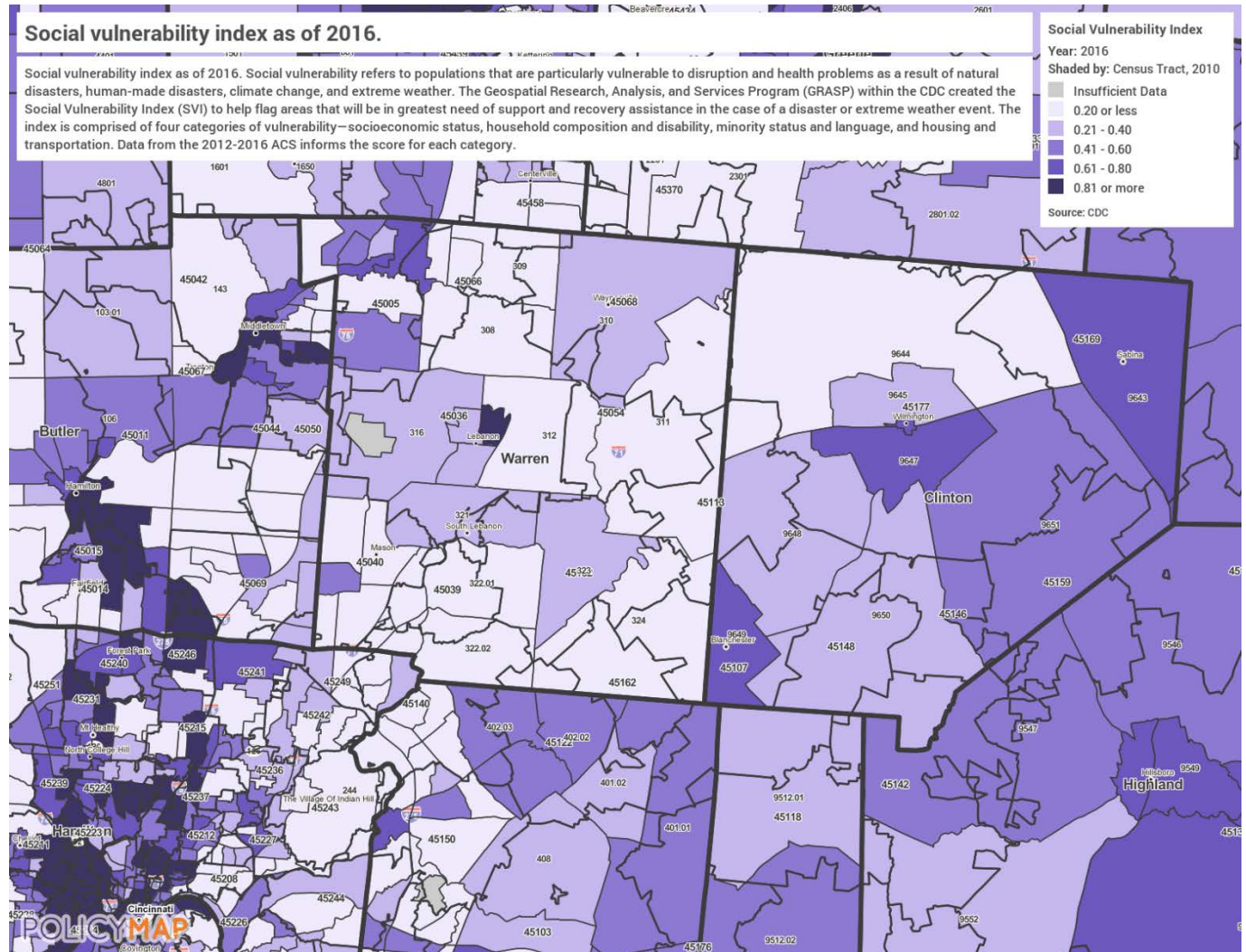


## Social Vulnerability Index – Montgomery County and Greene County



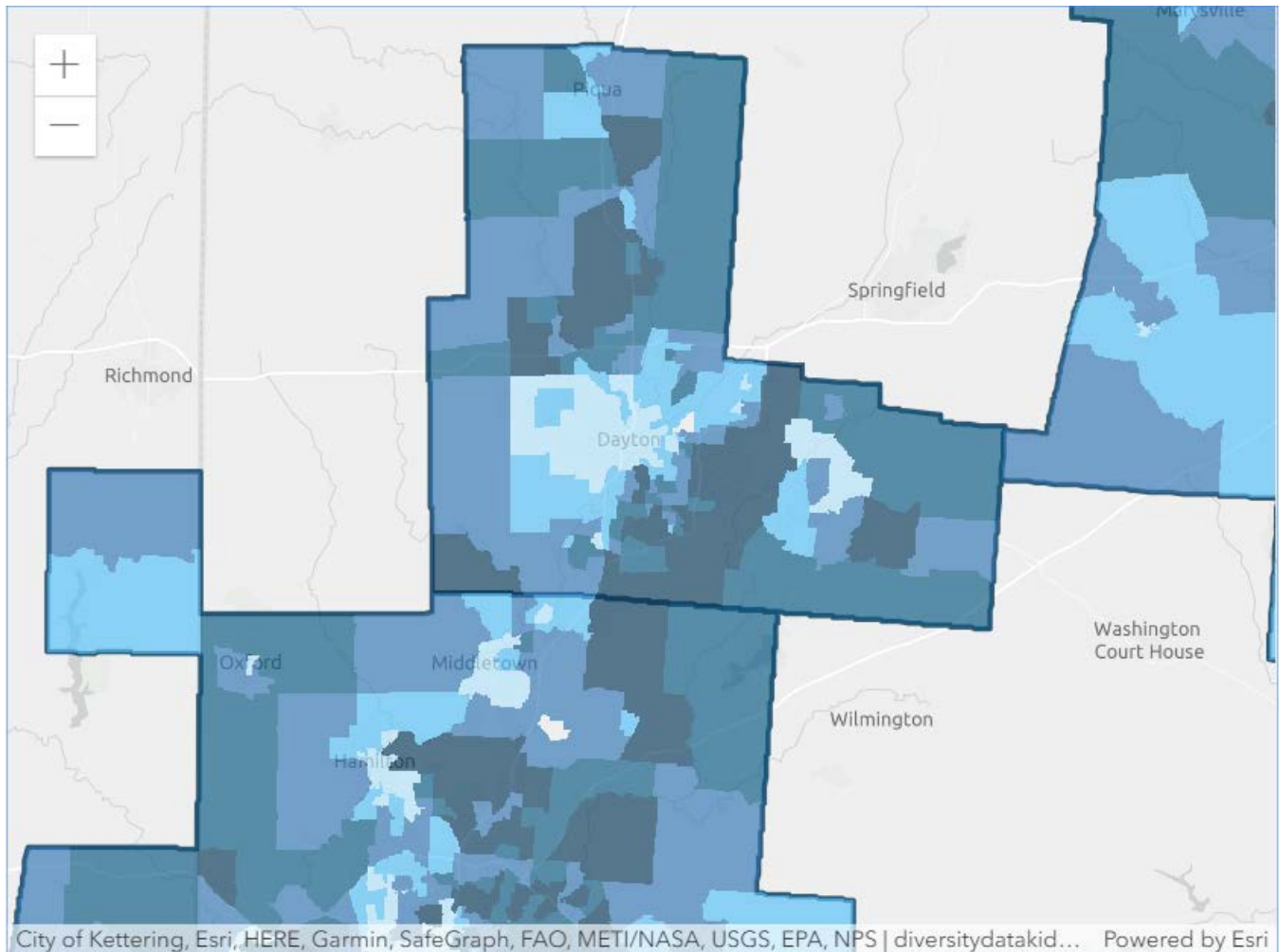
Source of Social Vulnerability Index: CDC National Center for Health Statistics, the United States Small-area Life Expectancy Estimates Project (USALEEP). Social Vulnerability Index 2016. PolicyMap. <https://plcy.mp/pHcs3gn> (13 April 2020).

## Social Vulnerability Index – Warren County



Source of Social Vulnerability Index: CDC National Center for Health Statistics, the United States Small-area Life Expectancy Estimates Project (USALEEP). Social Vulnerability Index 2016. PolicyMap. <https://plcy.mp/QWChM6Z> (13 April 2020).

## Childhood Opportunity Index



### Neighborhood opportunity levels

Very low    Low    Moderate    High    Very high

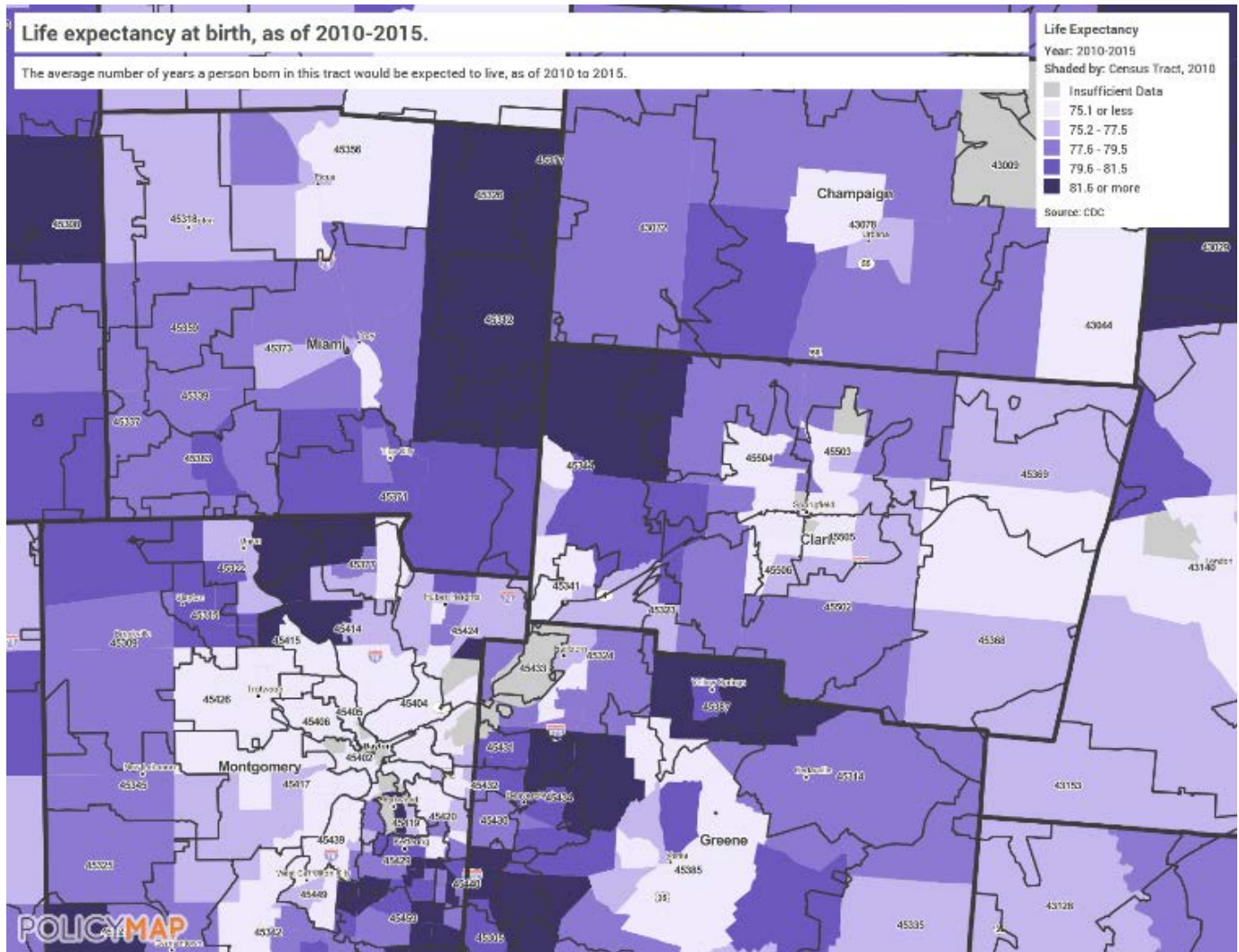
The Child Opportunity Index (COI) 2.0 is an index of neighborhood features that help children develop in a healthy way. The Child Opportunity Levels are five categories of neighborhood opportunity ranging from very low – to very high-opportunity. Neighborhoods are first ranked then divided into one of the five categories, that each contain 20% of the child population. Percentiles are weighted using the total number of children in a given tract to define cut points dividing neighborhoods into groups that contain 20% of the child population each. Nationally and metro normed score are different but strongly correlated. Nationally and metro normed levels are often the same and are very highly correlated in most places.

For more information visit: <http://new.diversitydatakids.org/research-library/research-brief/what-child-opportunity>

Source for map: *What does child opportunity look like in your metro?* (2019, November 17). Retrieved April 14, 2020, from <http://diversitydatakids.org/research-library/data-visualization/what-does-child-opportunity-look-your-metro>

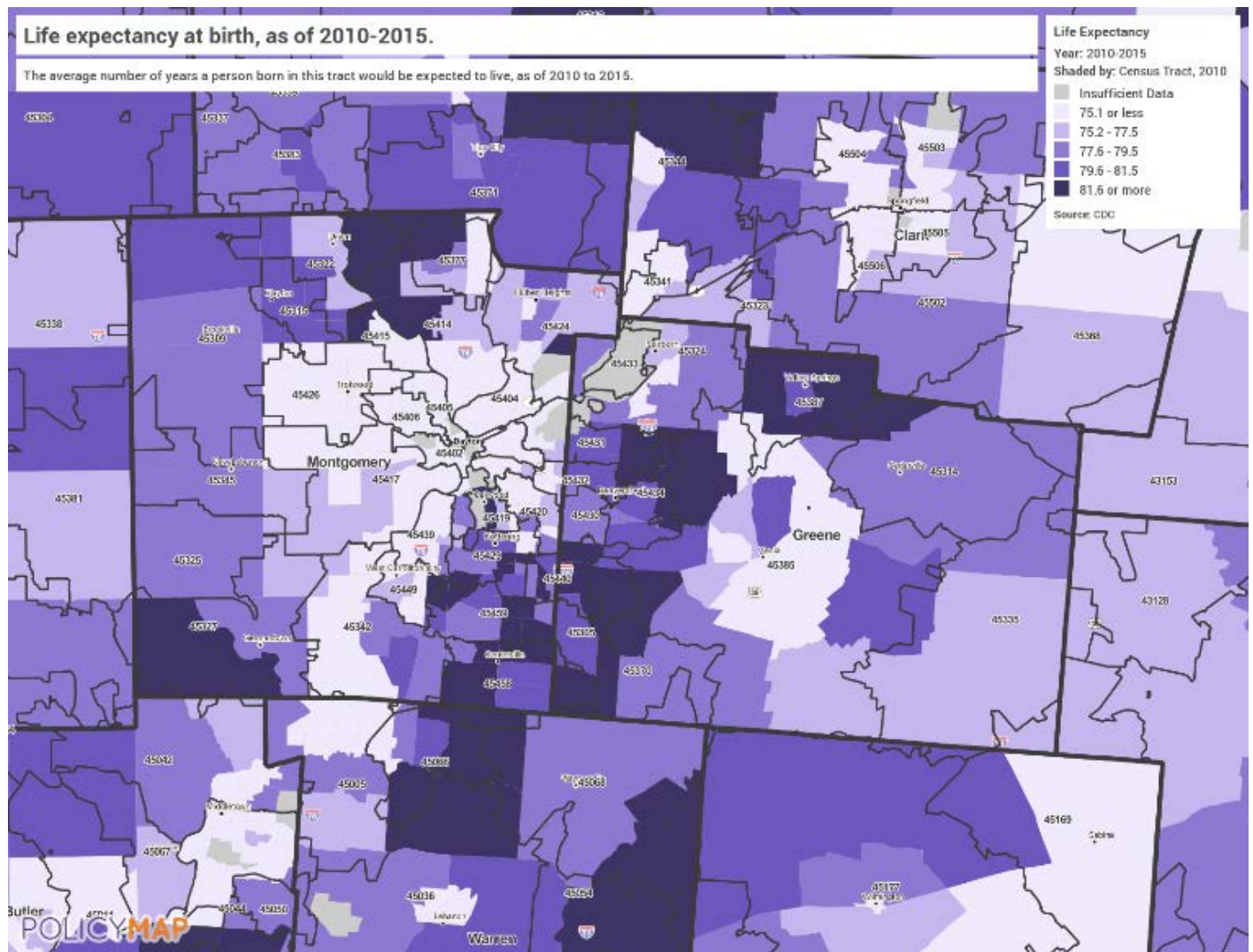


## Life Expectancy – Miami County and Clark County



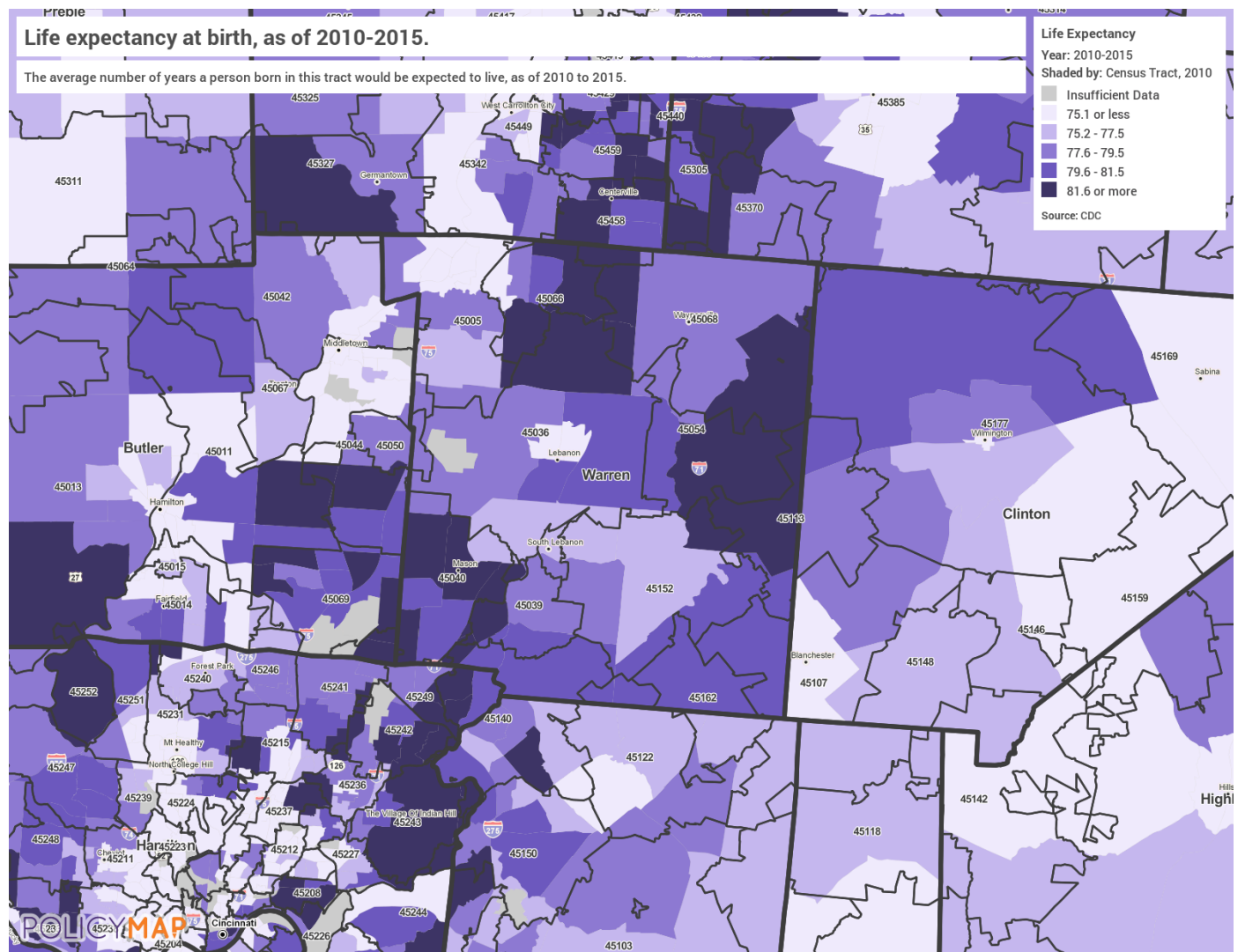
Source of Life Expectancy: Centers for Disease Control and Prevention (CDC) National Center for Health Statistics, Small-area Life Expectancy Estimates. Life Expectancy at Birth 2010-2015. PolicyMap. <https://plcy.mp/jVgjSr8> (13 April 2020).

## Life Expectancy – Montgomery County and Greene County



Source of Life Expectancy: Centers for Disease Control and Prevention (CDC) National Center for Health Statistics, Small-area Life Expectancy Estimates. Life Expectancy at Birth 2010-2015. PolicyMap. <https://pky.mp/vMQ1n3w> (13 April 2020).

## Life Expectancy – Warren County



Source of Life Expectancy: Centers for Disease Control and Prevention (CDC) National Center for Health Statistics, Small-area Life Expectancy Estimates. Life Expectancy at Birth 2010-2015. PolicyMap. <https://plcy.mp/mJMGWw8> (13 April 2020).



Child 0-5 Comparisons	Dayton 2020 Ages 0-5 (n=42)	Outside of Dayton 2020 Ages 0-5 (n=61)	Greater Dayton Area 2017 Ages 0-5	Greater Dayton Area 2020 Ages 0-5	Ohio 2017/18 Ages 0-5	U.S. 2017/18 Ages 0-5
<b>Family eats a meal together every day of the week</b>	54%	69%	49%	62%	57%	54%
<b>Two or more adverse childhood experiences (ACEs)</b>	5%	5%	7%	5%	13%	10%
<b>Parent or family member quit a job, not take a job, or greatly change job because of problems with childcare for child (in the past year)</b>	12%	5%	11%	8%	10%	9%
<b>Primary language spoken at home was dialect other than English</b>	0%	0%	1%	0%	5%	16%
<b>Family member received benefits from the Women, Infants, and Children (WIC) program (in the past year)</b>	10%	8%	18%	9%	17%	24%
<b>Family member received cash assistance from a government welfare program (in the past year)</b>	0%	3%	4%	2%	5%	4%
<b>Family member received Food Stamps or Supplemental Nutrition Assistance Program (SNAP) benefits (in the past year)</b>	5%	7%	17%	6%	19%	21%
<b>Family member received free or reduced-cost breakfasts or lunches at school (in the past year)</b>	5%	8%	9%	7%	17%	22%

<b>Child 6-11 Comparisons</b>	<b>Dayton 2020 Ages 6-11 (n=95)</b>	<b>Outside of Dayton 2020 Ages 6-11 (n=128)</b>	<b>Greater Dayton Area 2017 Ages 6-11</b>	<b>Greater Dayton Area 2020 Ages 6-11</b>	<b>Ohio 2017/18 Ages 6-11</b>	<b>U.S. 2017/18 Ages 6-11</b>
<b>Family eats a meal together every day of the week</b>	34%	49%	35%	37%	44%	45%
<b>Two or more adverse childhood experiences (ACEs)</b>	12%	5%	9%	9%	27%	20%
<b>Parent or family member quit a job, not take a job, or greatly change job because of problems with childcare for child (in past year)</b>	5%	3%	2%	4%	N/A	N/A
<b>Primary language spoken at home was dialect other than English</b>	0%	0%	1%	0%	5%	14%
<b>Received benefits from the Women, Infants, and Children (WIC) program (in the past 12 months)</b>	1%	0%	0%	1%	11%	9%
<b>Received cash assistance from a government welfare program (in the past year)</b>	0%	2%	2%	1%	4%	4%
<b>Family member received Food Stamps or Supplemental Nutrition Assistance Program (SNAP) benefits (in the past year)</b>	10%	6%	8%	8%	24%	20%
<b>Family member received free or reduced-cost breakfasts or lunches at school (in the past year)</b>	16%	11%	16%	13%	33%	39%

N/A – Not Available

# Parent Health

## Key Findings

*In 2020, 17% of Greater Dayton Area parents were uninsured. Eight percent (8%) of parents rated their mental and emotional health as fair or poor, increasing to 24% of those with incomes less than \$25,000. In the past year, 55% of Greater Dayton Area parents missed work due to their child's illnesses or injuries.*

## Parent Demographics

- Those filling out the survey had the following relationship to the child: mother (75%), father (23%), grandparent (1%), and other non-relative (<1%).
- Greater Dayton Area parents reported their child lived with them:
  - 0 days per week (0%)
  - 1 to 2 days per week (<1%)
  - 3 to 4 days per week (1%)
  - 5 to 6 days per week (3%)
  - 7 days per week (96%)
- Parents of children were:
  - Married (82%)
  - Divorced (7%)
  - Never married (6%)
  - A member of an unmarried couple (4%)
  - Separated (1%)
- Ninety-seven percent (97%) of parents were born in the United States and 1% were not born in the United States. Eighty-nine percent (89%) of parents indicated their child was born in the United States, and 1% of parents said their child was not born in the United States.

## Parent Health

- Seventeen percent (17%) of parents were uninsured.
- Sixty-nine percent (69%) of parents rated their physical health as excellent or very good, decreasing to 44% of parents with incomes less than \$25,000. Seven percent (7%) of parents had rated their physical health as fair or poor.
- Three percent (3%) of mothers and 4% of fathers of 0 to 5 year olds rated their physical health as fair or poor. Nine percent (9%) of mothers and 6% of fathers of 6 to 11 year olds rated their physical health as fair or poor.
- Sixty-eight percent (68%) of parents rated their mental and emotional health as excellent or very good, decreasing to 52% of parents with incomes less than \$25,000. Eight percent (8%) of parents rated their mental and emotional health as fair or poor, increasing to 24% of those with incomes less than \$25,000.
- Six percent (6%) of mothers and 13% of fathers of 0 to 5 year olds rated their mental and emotional health as fair or poor. Eight percent (8%) of mothers and 6% of fathers of 6 to 11 year olds rated their mental or emotional health as fair or poor.

- In times of need, parents reported they could count on:
  - At least one person (5%)
  - 2 people (12%)
  - 3 or 4 people (31%)
  - 5 or more people (52%)
  - No one (<1%)
- In the past year, 55% of Greater Dayton Area parents missed work due to their child's illnesses or injuries. Forty-four percent (44%) of parents missed work due to their child's medical appointments, 7% missed work due to lack of or unreliable childcare, 3% missed work due to their child's asthma, and 3% missed work due to their child's behavioral/emotional problems.
- Parents reported the following challenges they faced in regard to the day-to-day demands of parenthood/raising children:
 

— Demands of multiple children (47%)	— Lack of parental support (4%)
— Working long hours (19%)	— Loss of independence (3%)
— Financial burdens (13%)	— Post-partum depression (2%)
— Managing child's behavior (9%)	— Unemployment (2%)
— Being a single parent (8%)	— Lack of transportation (1%)
— Childcare issues (5%)	— Alcohol and/or drug abuse (<1%)
— Child has special needs (5%)	— Affordable housing (<1%)
— Mental health (5%)	— Domestic violence relationship (<1%)
— Difficulty with lifestyle changes (5%)	
- More than one-third (35%) of parents reported having more than one difficulty, increasing to 64% of parents with incomes of less than \$25,000. Thirty-nine percent (39%) of parents reported they did not have any issues coping with any of the above.

### Family Resilience

- When Ohio families are faced with a problem...
  - 51% reported they are likely to talk together about what to do all the time, increasing to 59% of families of 0-5-year-olds.
  - 53% reported they are likely to stay hopeful even in difficult times all of the time, increasing to 57% of families with 0-5-year-olds.
  - 49% reported they are likely to work together to solve the problems all of the time, increasing to 56% of families with 0-5-year-olds.
  - 53% reported likely to know their family strengths to draw on all of the time.
- Families reported their child lives in a home where the family demonstrates qualities of resilience during difficult times: all or most of the time to all four bullets above (83%), all or most of the time to two to three bullets (12%), and all or most of the time to zero to one bullet (5%).

*(Source: National Survey of Children's Health, Data Resource Center for Child & Adolescent Health, 2016-2018)*

Child 0-5 Comparisons	Dayton 2020 Ages 0-5 (n=42)	Outside of Dayton 2020 Ages 0-5 (n=61)	Greater Dayton Area 2017 Ages 0-5	Greater Dayton Area 2020 Ages 0-5	Ohio 2017/18 Ages 0-5	U.S. 2017/18 Ages 0-5
<b>Mother's mental or emotional health is fair/poor</b>	3%	9%	19%	6%	9%	5%
<b>Father's mental or emotional health is fair/poor</b>	27%	13%	11%	13%	7%	3%
<b>Mother's physical health status is fair/poor</b>	3%	2%	N/A	3%	3%	4%
<b>Father's physical health status is fair/poor</b>	9%	0%	N/A	4%	3%	5%

N/A – Not Available

Child 6-11 Comparisons	Dayton 2020 Ages 6-11 (n=95)	Outside of Dayton 2020 Ages 6-11 (n=128)	Greater Dayton Area 2017 Ages 6-11	Greater Dayton Area 2020 Ages 6-11	Ohio 2017/18 Ages 6-11	U.S. 2017/18 Ages 6-11
<b>Mother's mental or emotional health is fair/poor</b>	12%	5%	13%	8%	9%	5%
<b>Father's mental or emotional health is fair/poor</b>	11%	6%	19%	6%	4%	3%
<b>Mother's physical health status is fair/poor</b>	12%	6%	N/A	9%	7%	6%
<b>Father's physical health status is fair/poor</b>	11%	3%	N/A	6%	7%	4%

N/A – Not Available

## Appendix I: Health Information Sources

Source	Data Used	Website
Brady Campaign To Prevent Gun Violence	Annual Gun Violence Impacting Children and Teens (ages 1-17)	<a href="https://www.bradyunited.org/key-statistics">https://www.bradyunited.org/key-statistics</a>
Center for Disease Control and Prevention (CDC)	Breastfeeding – Recommendations and Benefits	<a href="https://www.cdc.gov/nutrition/infantandtoddlernutrition/breastfeeding/recommendations-benefits.html">https://www.cdc.gov/nutrition/infantandtoddlernutrition/breastfeeding/recommendations-benefits.html</a>
	Caring for Children in a Disaster	<a href="https://www.cdc.gov/childrenindisasters/features/disasters-mental-health.html">https://www.cdc.gov/childrenindisasters/features/disasters-mental-health.html</a>
	How Can Smoking Harm Your Baby?	<a href="https://www.cdc.gov/tobacco/campaign/tips/diseases/pregnancy.html">https://www.cdc.gov/tobacco/campaign/tips/diseases/pregnancy.html</a>
	Physical Activity Among School-Aged Children and Adolescents	<a href="https://www.cdc.gov/healthyschools/physicalactivity/facts.htm">https://www.cdc.gov/healthyschools/physicalactivity/facts.htm</a>
	Preventing Adverse Childhood Experiences	<a href="https://www.cdc.gov/violenceprevention/childabuseandneglect/aces/fastfact.html">https://www.cdc.gov/violenceprevention/childabuseandneglect/aces/fastfact.html</a>
	Violence Prevention   ACEs Fast Facts	<a href="http://www.cdc.gov/violenceprevention/childabuseandneglect/aces/fastfact.html">www.cdc.gov/violenceprevention/childabuseandneglect/aces/fastfact.html</a>
	2020 Recommended Vaccinations for Children	<a href="https://www.cdc.gov/vaccines/schedules/easy-to-read/adolescent-easyread.html">https://www.cdc.gov/vaccines/schedules/easy-to-read/adolescent-easyread.html</a>
Dayton Children’s Hospital	Current State of Children’s Health As seen Through Key Community Partners Social Drivers of Health (Economic Stability, Food Insecurity, Education, Health Care System, Social and Community Contact) Key Informant Interviews for Military Families	Not Available Website(s) available within appropriate section
Diversitydatakids.org	Child Opportunity Index	<a href="http://diversitydatakids.org/research-library/data-visualization/what-does-child-opportunity-look-your-metro">http://diversitydatakids.org/research-library/data-visualization/what-does-child-opportunity-look-your-metro</a>
Feeding America	Food Insecurity	<a href="https://map.feedingamerica.org/">https://map.feedingamerica.org/</a>
National Survey of Children’s Health, 2016/18, Child and Adolescent Health Measurement Initiative	Children and Smoking Family Resilience	<a href="http://www.childhealthdata.org">www.childhealthdata.org</a>
Ohio Department of Health, Maternal and Child Health, Early Childhood, 2017	Sleep-Related Infant Deaths Risk Factors	<a href="http://odh.ohio.gov/wps/wcm/connect/gov/b3952168-8142-4539-9121-d34cf1ec1f87/Sleeprelatedinfantdeaths.pdf?MOD=AJPERES&amp;CONVERT_TO=url&amp;CACHEID=ROOTWORKSPACE.Z18_M1HGGIK0N0JO00QO9DDDDM3000-b3952168-8142-4539-9121-d34cf1ec1f87-mqyrGeg">odh.ohio.gov/wps/wcm/connect/gov/b3952168-8142-4539-9121-d34cf1ec1f87/Sleeprelatedinfantdeaths.pdf?MOD=AJPERES&amp;CONVERT_TO=url&amp;CACHEID=ROOTWORKSPACE.Z18_M1HGGIK0N0JO00QO9DDDDM3000-b3952168-8142-4539-9121-d34cf1ec1f87-mqyrGeg</a>
Ohio Department of Health, Infant Safe Sleep	ABCs of Safe Sleep	<a href="http://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/maternal-child-health-program/safe-sleep/">odh.ohio.gov/wps/portal/gov/odh/know-our-programs/maternal-child-health-program/safe-sleep/</a>



Source	Data Used	Website
Ohio Department of Health, Ohio Child Fatality Review, 2018 Annual Report	Sleep-Related Deaths Ohio Five-Year Average Infant Mortality Rates by County	<a href="https://odh.ohio.gov/wps/wcm/connect/gov/dd1865c0-909c-4378-a8e0-61e28364bbae/2018+Ohio+Infant+Mortality+Report.pdf?MOD=AJPERES&amp;CONVERT_TO=url&amp;CACHEID=ROOTWORKSPACE.Z18_M1HGGIK0N0JO00QO9DDDDM3000-dd1865c0-909c-4378-a8e0-61e28364bbae-n1Z1tQk">https://odh.ohio.gov/wps/wcm/connect/gov/dd1865c0-909c-4378-a8e0-61e28364bbae/2018+Ohio+Infant+Mortality+Report.pdf?MOD=AJPERES&amp;CONVERT_TO=url&amp;CACHEID=ROOTWORKSPACE.Z18_M1HGGIK0N0JO00QO9DDDDM3000-dd1865c0-909c-4378-a8e0-61e28364bbae-n1Z1tQk</a>
Ohio Department of Health, Public Health Data Warehouse	Live Births	<a href="http://publicapps.odh.ohio.gov/EDW/DataCatalog">publicapps.odh.ohio.gov/EDW/DataCatalog</a>
Policy Map	Food Insecurity Lead Exposure Risk Life Expectancy Number of Parks within a 10 Minute Walk Social Vulnerability Index	<a href="https://www.policymap.com/">https://www.policymap.com/</a>
U. S. Department of Commerce, Census Bureau; Bureau of Economic Analysis	American Community Survey 1 year estimate, 2018 Ohio and County 2012 Census Demographic Information Small Area Income and Poverty Estimates Federal Poverty Thresholds	<a href="http://www.census.gov">www.census.gov</a>

## Appendix II: Acronyms and Terms

<b>BMI</b>	<b>Body Mass Index</b> is defined as the contrasting measurement/relationship of weight to height.
<b>CDC</b>	<b>Centers for Disease Control and Prevention.</b>
<b>CY</b>	<b>Calendar Year</b>
<b>HCNO</b>	<b>Hospital Council of Northwest Ohio</b>
<b>HP 2020</b>	<b>Healthy People 2020</b> , a comprehensive set of health objectives published by the Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services.
<b>Health Indicator</b>	A measure of the health of people in a community, such as cancer mortality rates, rates of obesity, or incidence of cigarette smoking.
<b>IID</b>	<b>Immunizations and Infectious Diseases</b> , Topic of Healthy People 2020 objectives
<b>N/A</b>	Data is not available.
<b>NSCH</b>	<b>National Survey of Children’s Health</b>
<b>ODH</b>	<b>Ohio Department of Health</b>
<b>Race/Ethnicity</b>	<b>Census 2010:</b> U.S. Census data consider race and Hispanic origin separately. Census 2010 adhered to the standards of the Office of Management and Budget (OMB), which define Hispanic or Latino as “a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.” Data are presented as “Hispanic or Latino” and “Not Hispanic or Latino.” Census 2010 reported five race categories including: White, Black or African American, American Indian & Alaska Native, Asian, Native Hawaiian and Other Pacific Islander. Data reported, “White alone” or “Black alone”, means the respondents reported only one race.
<b>SHA</b>	<b>State Health Assessment</b>
<b>SHIP</b>	<b>State Health Improvement Plan</b>

## Appendix III: Sample Demographic Profile

Variable	2019 Survey Sample
<b>Child Age</b>	
0-5	32%
6-11	68%
<b>Child Gender</b>	
Male	56%
Female	44%
<b>Child Race/Ethnicity</b>	
White	93%
Black or African American	5%
Native Hawaiian or Other Pacific Islander	1%
American Indian and Alaska Native	<1%
Asian	2%
Hispanic Origin (may be of any race)	4%
<b>Parent Marital Status</b>	
Married Couple	82%
Never been married/member of an unmarried couple	10%
Divorced/Separated	8%
Widowed	0%
<b>Parent Education</b>	
Less than High School Diploma	1%
High School Diploma	7%
Some college	32%
College graduate/Post-graduate	60%
<b>Income (Families)</b>	
\$14,999 and less	3%
\$15,000 to \$24,999	5%
\$25,000 to \$49,999	10%
\$50,000 to \$74,999	15%
\$75,000 or more	64%

\* The percents reported are the actual percent within each category who responded to the survey. The data contained within the report however are based on weighted data (weighted by age, race, sex, and income). Percents may not add to 100% due to missing data (non-responses).

# Appendix IV: Demographics and Household Information

## Greater Dayton Area Population by Age Groups U.S. Census 2010

	Clark County	Greene County	Miami County	Montgomery County	Warren County
<b>Total population (all ages)</b>	138,333	161,573	102,506	535,153	212,693
<b>Under 5 years</b>	<b>8,672</b>	<b>9,069</b>	<b>6,315</b>	<b>33,446</b>	<b>14,285</b>
Under 1 year	1,650	1,763	1,204	6,700	2,581
1 year	1,686	1,782	1,284	6,603	2,727
2 years	1,831	1,849	1,239	6,715	2,871
3 years	1,776	1,825	1,277	6,832	3,043
4 years	1,729	1,850	1,311	6,596	3,063
<b>5 to 9 years</b>	<b>8,844</b>	<b>9,777</b>	<b>6,872</b>	<b>33,681</b>	<b>17,288</b>
5 years	1,703	1,926	1,276	6,631	3,261
6 years	1,756	1,920	1,365	6,646	3,473
7 years	1,705	1,977	1,395	6,588	3,419
8 years	1,843	1,958	1,402	6,823	3,463
9 years	1,837	1,996	1,434	6,993	3,672
<b>10 to 14 years</b>	<b>9,229</b>	<b>9,852</b>	<b>7,099</b>	<b>34,295</b>	<b>17,355</b>
10 years	1,920	1,952	1,415	6,945	3,661
11 years	1,843	2,010	1,404	6,985	3,455
12 years	1,817	1,917	1,424	6,815	3,567
13 years	1,865	2,019	1,405	6,724	3,279
14 years	1,784	1,954	1,451	6,826	3,393

# GREATER DAYTON AREA PROFILE

(Source: U.S. Census Bureau, 2018)  
2018 ACS 1-year estimates

## General Demographic Characteristics

	Clark County		Greene County		Miami County		Montgomery County		Warren County	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
<b>Total Population</b>										
2018 Total Population	134,585	100%	167,995	100%	106,222	100%	532,331	100%	232,173	100%
<b>Largest City</b>										
	<b>Springfield</b>		<b>Beavercreek</b>		<b>Troy</b>		<b>Dayton</b>		<b>Mason</b>	
2018 Total Population	59,305	100%	46,600	100%	25,894	100%	140,782	100%	32,749	100%
<b>Population by Race/Ethnicity</b>										
Total population	134,585	100%	167,995	100%	106,222	100%	532,331	100%	232,173	100%
White	122,051	90.7%	148,433	88.4%	102,481	96.5%	402,503	75.6%	208,736	89.9%
Black or African American	14,938	11.1%	15,582	9.3%	2,689	2.5%	121,914	22.9%	9,865	4.2%
American Indian and Alaska Native	961	0.7%	1,503	0.9%	1,724	1.6%	6,149	1.2%	1,263	0.5%
Asian	1,487	1.1%	7,124	4.2%	2,174	2.0%	15,602	2.9%	15,964	6.9%
Native Hawaiian and Other Pacific Islander	0	0%	0	0%	0	0%	1,098	0.2%	0	0%
Some other race	451	0.3%	951	0.6%	0	0%	5,298	1.0%	443	0.2%
Hispanic or Latino	4,732	3.5%	4,925	2.9%	1,845	1.7%	16,459	3.1%	6,552	2.8%
<b>Population by Age</b>										
Under 5 years	7,874	5.9%	9,284	5.5%	6,146	5.8%	32,597	6.1%	13,093	5.6%
5 to 9 years	7,259	5.4%	8,597	5.1%	7,487	7.0%	31,485	5.9%	12,668	5.5%
10 to 14 years	9,684	7.2%	10,599	6.3%	6,569	6.2%	33,295	6.3%	20,105	8.7%
15 to 19 years	9,399	7.0%	13,665	8.1%	6,673	6.3%	33,939	6.4%	16,757	7.2%
20 to 24 years	8,035	6.0%	13,144	7.8%	5,165	4.9%	34,993	6.6%	12,049	5.2%
25 to 34 years	15,750	11.7%	22,296	13.3%	12,499	11.8%	72,345	13.6%	27,539	11.9%
35 to 44 years	15,238	11.3%	19,080	11.4%	12,622	11.9%	61,136	11.5%	31,796	13.7%
45 to 54 years	16,994	12.6%	19,755	11.8%	13,558	12.8%	65,056	12.2%	33,952	14.6%
55 to 59 years	9,114	6.8%	11,242	6.7%	7,684	7.2%	37,029	7.0%	18,541	8.0%
60 to 64 years	9,281	6.9%	11,274	6.7%	7,283	6.9%	34,812	6.5%	12,293	5.3%
65 to 74 years	14,885	11.1%	17,023	10.1%	11,586	10.9%	53,821	10.1%	20,150	8.7%
75 to 84 years	7,223	5.4%	9,750	5.8%	7,128	6.7%	28,177	5.3%	8,791	3.8%
85 years and over	3,849	2.9%	2,286	1.4%	1,822	1.7%	13,646	2.6%	4,439	1.9%
<b>Median age (years)</b>	<b>41.5</b>	<b>(X)</b>	<b>37.9</b>	<b>(X)</b>	<b>42.0</b>	<b>(X)</b>	<b>39.2</b>	<b>(X)</b>	<b>39.2</b>	<b>(X)</b>

**Selected Social Characteristics**

	Clark County		Greene County		Miami County		Montgomery County		Warren County	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
<b>School Enrollment</b>										
Population 3 years and over enrolled in school	31,526	100%	47,120	100%	26,023	100%	127,914	100%	59,466	100%
Nursery & preschool	2,236	7.1%	2,353	5.0%	2,312	8.9%	6,634	5.2%	4,304	7.2%
Kindergarten	22,977	72.9%	25,477	54.1%	17,784	68.3%	85,339	66.7%	43,613	73.3%
Elementary: grade 1 to grade 4	6,256	19.8%	7,514	15.9%	6,506	25.0%	26,158	20.4%	10,394	17.5%
Elementary: grade 5 to grade 8	7,883	25.0%	7,935	16.8%	4,241	16.3%	25,539	20.0%	17,171	28.9%
High school: grade 9 to grade 12	7,531	23.9%	8,652	18.4%	5,820	22.4%	27,724	21.7%	13,972	23.5%
College, undergraduate	5,437	17.2%	15,736	33.4%	4,759	18.3%	29,101	22.8%	7,451	12.5%
Graduate, professional school	876	2.8%	3,554	7.5%	1,168	4.5%	6,840	5.3%	4,098	6.9%
<b>Educational Attainment</b>										
Population 25 years and over	92,344	100%	111,225	100%	72,762	100%	363,741	100%	151,708	100%
< 9 <sup>th</sup> grade education	2,798	3.0%	2,530	2.3%	1,475	2.0%	9,496	2.6%	2,702	1.8%
9 <sup>th</sup> to 12 <sup>th</sup> grade, no diploma	8,753	9.5%	4,861	4.4%	5,646	7.8%	26,539	7.3%	7,202	4.7%
High school graduate (includes equivalency)	33,945	36.8%	27,141	24.4%	26,778	36.8%	102,039	28.1%	39,228	25.9%
Some college, no degree	21,093	22.8%	23,464	21.1%	15,725	21.6%	89,693	24.7%	25,274	16.7%
Associate degree	8,560	9.3%	9,859	8.9%	6,713	9.2%	36,209	10.0%	13,123	8.7%
Bachelor's degree	10,517	11.4%	22,689	20.4%	10,263	14.1%	59,412	16.3%	40,139	26.5%
Graduate or professional degree	6,678	7.2%	20,681	18.6%	6,162	8.5%	40,353	11.1%	24,040	15.8%
Percent high school graduate or higher	80,793	87.5%	103,834	93.4%	65,641	90.2%	327,706	90.1%	141,804	93.5%
Percent Bachelor's degree or higher	17,195	18.6%	43,370	39.0%	16,425	22.6%	99,765	27.4%	64,179	42.3%
<b>Marital Status (5 year estimate)</b>										
Population 15 years and over	109,879	100%	137,554	100%	84,888	100%	433,898	100%	179,993	100%
Never married	32,085	29.2%	42,642	31.0%	22,326	26.3%	147,525	34.0%	45,358	25.2%
Now married, excluding separated	52,302	47.6%	71,253	51.8%	44,821	52.8%	191,783	44.2%	105,476	58.6%
Separated	2,198	2.0%	1,651	1.2%	849	1.0%	7,810	1.8%	1,980	1.1%
Widowed	85	0.1%	7,565	5.5%	6,112	7.2%	29,505	6.8%	9,180	5.1%
Divorced	14,834	13.5%	14,306	10.4%	10,781	12.7%	57,275	13.2%	17,819	9.9%
<b>Veteran Status</b>										
Civilian population 18 years and over	104,346	100%	130,694	100%	81,258	100%	413,710	100%	175,387	100%
Veterans 18 years and over	11,318	10.8%	14,815	11.3%	7,330	9.0%	40,092	9.7%	13,086	7.5%



**Selected Social Characteristics, Continued**

	Clark County		Greene County		Miami County		Montgomery County		Warren County	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
<b>Disability Status of the Civilian Non-Institutionalized Population</b>										
Total civilian noninstitutionalized population	223,907	100%	132,970	100%	105,192	100%	524,479	100%	163,624	100%
Civilian with a disability	25,523	11.4%	25,706	19.3%	13,356	12.7%	80,272	15.3%	24,834	15.2%
Under 18 years	30,065	13.4%	34,803	26.2%	24,747	23.5%	117,416	22.4%	56,526	34.5%
Under 18 years with a disability	1,957	0.9%	2,387	1.8%	525	0.5%	6,664	1.3%	2,504	1.5%
18 to 64 years	77,915	34.8%	100,236	75.4%	60,472	57.5%	315,636	60.2%	135,171	82.6%
18 to 64 years with a disability	13,683	6.1%	11,901	9.0%	6,239	5.9%	41,083	7.8%	11,005	6.7%
65 Years and over	24,990	11.2%	28,585	21.5%	19,973	19.0%	91,427	17.4%	32,210	19.7%
65 Years and over with a disability	10,066	11.4%	10,546	7.9%	6,592	6.3%	32,525	6.2%	12,014	7.3%

**Selected Economic Characteristics**

	Clark County		Greene County		Miami County		Montgomery County		Warren County	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
<b>Employment Status</b>										
Population 16 years and over	108,194	100%	137,609	100%	84,589	100%	428,446	100%	182,403	100%
16 years and over in labor force	65,285	60.3%	86,023	62.5%	53,990	63.8%	269,109	62.8%	120,407	66.0%
16 years and over not in labor force	42,909	39.7%	51,586	37.5%	30,599	36.2%	159,337	37.2%	61,996	34.0%
Females 16 years and over	56,525	56,525	70,371	70,371	43,340	43,340	225,079	225,079	91,118	91,118
Females 16 years and over in labor force	31,036	54.9%	41,379	58.8%	26,046	60.1%	131,147	58.3%	56,141	61.6%
Population living with own children <6 years	8,844	100%	10,164	100%	7,696	100%	36,589	100%	14,365	100%
All parents in family in labor force	13,958	76.9%	16,799	76.4%	12,138	75.7%	57,544	78.2%	28,479	70.9%
<b>Class of Worker</b>										
Civilian employed population 16 years and over	60,325	100%	78,956	100%	51,448	100%	252,130	100%	116,822	100%
Private wage and salary workers	50,440	83.6%	59,007	74.7%	42,090	81.8%	210,155	83.4%	95,832	82.0%
Government workers	6,567	10.9%	16,337	20.7%	6,962	13.5%	30,233	12.0%	14,523	12.4%
Self-employed workers in own not incorporated business	3,181	5.3%	3,415	4.3%	2,396	4.7%	10,967	4.3%	6,386	5.5%
Unpaid family workers	137	0.2%	197	0.2%	0	0.0%	775	0.3%	81	0.1%

**Selected Economic Characteristics, Continued**

	Clark County		Greene County		Miami County		Montgomery County		Warren County	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
<b>Occupations</b>										
Civilian employed population 16 years and over	60,325	100%	78,956	100%	51,448	100%	252,130	100%	116,822	100%
Management, business, science, and arts occupations	16,330	27.1%	36,259	45.9%	20,528	39.9%	90,881	36.0%	58,273	49.9%
Service occupations	11,232	18.6%	12,205	15.5%	6,876	13.4%	44,881	17.8%	15,787	13.5%
Sales and office occupations	11,750	19.5%	18,866	23.9%	10,234	19.9%	57,107	22.6%	23,263	19.9%
Natural resources, construction, and maintenance occupations	5,234	8.7%	4,108	5.2%	3,571	6.9%	16,761	6.6%	6,350	5.4%
Production, transportation, and material moving occupations	15,779	26.2%	7,518	9.5%	10,239	19.9%	42,500	16.9%	13,149	11.3%
<b>Leading Industries</b>										
Civilian employed population 16 years and over	60,325	100%	78,956	100%	51,448	100%	252,130	100%	116,822	100%
Agriculture, forestry, fishing and hunting, and mining	617	1.0%	447	0.6%	359	0.7%	520	0.2%	134	0.1%
Construction	2,608	4.3%	4,072	5.2%	2,851	5.5%	12,773	5.1%	5,639	4.8%
Manufacturing	12,074	20.0%	7,452	9.4%	14,531	28.2%	33,471	13.3%	16,131	13.8%
Wholesale trade	2,101	3.5%	1,220	1.5%	843	1.6%	4,685	1.9%	4,246	3.6%
Retail trade	7,675	12.7%	9,915	12.6%	5,283	10.3%	29,440	11.7%	13,319	11.4%
Transportation and warehousing, and utilities	3,904	6.5%	2,368	3.0%	1,605	3.1%	12,128	4.8%	4,427	3.8%
Information	956	1.6%	1,444	1.8%	835	1.6%	6,063	2.4%	1,664	1.4%
Finance and insurance, and real estate and rental and leasing	2,855	4.7%	4,142	5.2%	1,247	2.4%	13,253	5.3%	9,364	8.0%
Professional, scientific, and management, and administrative and waste management services	4,673	7.7%	9,479	12.0%	3,137	6.1%	29,495	11.7%	17,299	14.8%
Educational services, and health care and social assistance	13,397	22.2%	21,261	26.9%	10,257	19.9%	61,493	24.4%	26,723	22.9%
Arts, entertainment, and recreation, and accommodation and food services	4,805	8.0%	5,802	7.3%	4,829	9.4%	24,538	9.7%	8,436	7.2%
Other services, except public administration	2,381	3.9%	3,200	4.1%	2,653	5.2%	12,807	5.1%	4,539	3.9%
Public administration	2,279	3.8%	8,154	10.3%	3,018	5.9%	11,464	4.5%	4,901	4.2%

**Selected Economic Characteristics, Continued**

	Clark County		Greene County		Miami County		Montgomery County		Warren County	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
<b>Income In 2018</b>										
Households	55,327	100%	66,053	100%	41,148	100%	224,225	100%	83,540	100%
< \$10,000	3,490	6.3%	4,558	6.9%	2,530	6.1%	18,427	8.2%	2,075	2.5%
\$10,000 to \$14,999	2,621	4.7%	2,503	3.8%	1,186	2.9%	13,863	6.2%	1,549	1.9%
\$15,000 to \$24,999	5,282	9.5%	5,638	8.5%	3,742	9.1%	21,552	9.6%	4,187	5.0%
\$25,000 to \$34,999	6,730	12.2%	3,996	6.0%	3,498	8.5%	24,809	11.1%	6,049	7.2%
\$35,000 to \$49,999	9,640	17.4%	7,548	11.4%	6,803	16.5%	31,697	14.1%	6,490	7.8%
\$50,000 to \$74,999	11,304	20.4%	11,443	17.3%	7,116	17.3%	40,049	17.9%	15,357	18.4%
\$75,000 to \$99,999	7,269	13.1%	9,737	14.7%	5,284	12.8%	27,300	12.2%	13,043	15.6%
\$100,000 to \$149,999	6,443	11.6%	9,733	14.7%	7,341	17.8%	27,243	12.1%	16,238	19.4%
\$150,000 to \$199,999	1,448	2.6%	5,725	8.7%	2,517	6.1%	11,121	5.0%	8,202	9.8%
\$200,000 or more	1,100	2.0%	5,172	7.8%	1,131	2.7%	8,164	3.6%	10,350	12.4%
<b>Median household income</b>	49,875	(X)	67,680	(X)	58,486	(X)	50,838	(X)	86,473	(X)
<b>Income in 2018</b>										
Families	34,548	100%	43,123	100%	26,294	100%	224,225	100%	83,540	100%
< \$10,000	1,245	3.6%	1,225	2.8%	588	2.2%	131,352	131,352	64,821	64,821
\$10,000 to \$14,999	1,120	3.2%	1,233	2.9%	230	0.9%	6,057	4.6%	1,106	1.7%
\$15,000 to \$24,999	2,568	7.4%	1,976	4.6%	1,069	4.1%	4,748	3.6%	838	1.3%
\$25,000 to \$34,999	3,747	10.8%	2,057	4.8%	1,372	5.2%	8,064	6.1%	2,291	3.5%
\$35,000 to \$49,999	4,942	14.3%	4,105	9.5%	3,298	12.5%	11,286	8.6%	2,207	3.4%
\$50,000 to \$74,999	7,441	21.5%	8,048	18.7%	5,231	19.9%	16,599	12.6%	4,282	6.6%
\$75,000 to \$99,999	5,617	16.3%	6,850	15.9%	4,430	16.8%	27,067	20.6%	11,861	18.3%
\$100,000 to \$149,999	5,869	17.0%	7,915	18.4%	6,428	24.4%	18,993	14.5%	10,610	16.4%
\$150,000 to \$199,999	1,267	3.7%	5,345	12.4%	2,517	9.6%	21,964	16.7%	14,517	22.4%
\$200,000 or more	732	2.1%	4,369	10.1%	1,131	4.3%	9,386	7.1%	7,550	11.6%
<b>Median family income</b>	61,737	(X)	84,368	(X)	81,425	(X)	67,103	(X)	96,433	(X)
<b>Per capita income in 2018</b>	26,272	(X)	36,162	(X)	30,792	(X)	29,970	(X)	40,816	(X)
<b>Poverty Status in 2018</b>										
People in families	(X)	10.9%	(X)	8.6%	(X)	4.5%	(X)	14.1%	(X)	4.3%
Unrelated individuals 15 years and over	(X)	28.1%	(X)	28.0%	(X)	18.3%	(X)	26.2%	(X)	11.1%

**Federal Poverty Thresholds in 2018 by Size of Family and Number of Related Children Under 18 Years of Age**

Size of Family Unit	No Children	One Child	Two Children	Three Children	Four Children	Five Children
1 Person <65 years	\$13,064					
1 Person 65 and >	\$12,043					
2 people Householder < 65 years	\$16,815	\$17,308				
2 People Householder 65 and >	\$15,178	\$17,242				
3 People	\$19,642	\$20,212	\$20,231			
4 People	\$25,900	\$26,324	\$25,465	\$20,231		
5 People	\$31,234	\$31,689	\$30,718	\$25,465	\$29,509	
6 People	\$35,925	\$36,068	\$35,324	\$34,612	\$33,553	\$32,925
7 People	\$41,336	\$41,594	\$40,705	\$40,085	\$38,929	\$37,581
8 People	\$46,231	\$46,640	\$45,800	\$45,064	\$44,021	\$42,696
9 People or >	\$55,613	\$55,883	\$55,140	\$54,516	\$53,491	\$52,082

*(Source: U. S. Census Bureau, Poverty Thresholds 2018,  
<https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>)*

## Appendix V: Hospital Utilization Data

Dayton Children’s partnered with the Greater Dayton Area Hospital Association (GDAHA) and Ascend to incorporate county level hospital discharge and utilization data within the community health needs assessment. The hospital utilization data included within the community health assessment is from July 2018 through June 2019. Data is broken down into age, encounter type, and payer type where applicable.

Each hospital provides data to the Ohio Hospitalization Association (OHA) for statewide consolidated reporting. Those data are at the patient level, where patients are de-identified. Each data record represents a single hospital admission; hence, individuals who are hospitalized multiple times are included in the database for each time they are admitted/discharged from the hospital. The hospital utilization data allows us to track the number of discharges for any Ohio-based acute care hospital over time. The database includes key demographic information (age, gender, race, county of residence) as well as information related to the hospitalization (primary diagnosis, and all secondary diagnoses). The data allowed us to isolate inpatients both in terms of where they were hospitalized (regardless of where they live) and where they live (regardless of where they were hospitalized).



Age Group	Number of Encounters (Excluding Births)
0-5	55113
5-11	31012
11-17	36379

Encounter Type	Number of Encounters (Excluding Births)
Emergency Department	118003
Inpatient	4501

In the OHA data, encounters have an **encounter type** which can be inpatient or outpatient. Encounters also have an **admission type** which can be emergency, urgent, elective, newborn, or trauma. For these tables if an encounter was listed as emergency and not inpatient it was labeled Emergency Department. If an encounter was listed as inpatient it was labeled as Inpatient.



### Inpatient Medicaid Ages 0-5

ICD-10		Number of Encounters	Percent of Encounters of Age Grouping	Number of Patients
All	All Encounters	1277	2.32 %	1080
J21.0	Acute bronchiolitis due to respiratory syncytial virus	100	0.18 %	99
J21.8	Acute bronchiolitis due to other specified organisms	54	0.1 %	50
P59.9	Neonatal jaundice, unspecified	52	0.09 %	52
E86.0	Dehydration	32	0.06 %	32
J06.9	Acute upper respiratory infection, unspecified	30	0.05 %	30
E43	Unspecified severe protein-calorie malnutrition	25	0.05 %	24
Z38.1	Single liveborn infant, born outside hospital	25	0.05 %	25
J21.9	Acute bronchiolitis, unspecified	24	0.04 %	22
R56.9	Unspecified convulsions	21	0.04 %	20
J96.01	Acute respiratory failure with hypoxia	17	0.03 %	17

### Inpatient No Medicaid Ages 0-5

ICD-10		Number of Encounters	Percent of Encounters of Age Grouping	Number of Patients
All	All Encounters	737	1.34 %	636
P59.9	Neonatal jaundice, unspecified	92	0.17 %	91
J21.0	Acute bronchiolitis due to respiratory syncytial virus	40	0.07 %	40
J21.8	Acute bronchiolitis due to other specified organisms	28	0.05 %	25
Z51.11	Encounter for antineoplastic chemotherapy	25	0.05 %	6
E86.0	Dehydration	12	0.02 %	12
P80.9	Hypothermia of newborn, unspecified	12	0.02 %	12
J21.9	Acute bronchiolitis, unspecified	10	0.02 %	10
Q40.0	Congenital hypertrophic pyloric stenosis	10	0.02 %	10
P81.9	Disturbance of temperature regulation of newborn, unspecified	9	0.02 %	9
R56.01	Complex febrile convulsions	9	0.02 %	9





### Emergency Department Medicaid Ages 0-5

ICD-10		Number of Encounters	Percent of Encounters of Age Grouping	Number of Patients
All	All Encounters	40185	72.91 %	17612
J06.9	Acute upper respiratory infection, unspecified	6135	11.13 %	4660
J02.0	Streptococcal pharyngitis	1471	2.67 %	1314
R50.9	Fever, unspecified	1203	2.18 %	1133
J10.1	Influenza due to other identified influenza virus with other respiratory manifestations	1110	2.01 %	1070
H66.91	Otitis media, unspecified, right ear	1034	1.88 %	945
J05.0	Acute obstructive laryngitis [croup]	1033	1.87 %	912
K52.9	Noninfective gastroenteritis and colitis, unspecified	974	1.77 %	910
H66.92	Otitis media, unspecified, left ear	930	1.69 %	853
B34.9	Viral infection, unspecified	917	1.66 %	876
R11.10	Vomiting, unspecified	892	1.62 %	844

### Emergency Department No Medicaid Ages 0-5

ICD-10		Number of Encounters	Percent of Encounters of Age Grouping	Number of Patients
All	All Encounters	12914	23.43 %	8745
J06.9	Acute upper respiratory infection, unspecified	1207	2.19 %	1080
J05.0	Acute obstructive laryngitis [croup]	680	1.23 %	619
R50.9	Fever, unspecified	464	0.84 %	430
J02.0	Streptococcal pharyngitis	379	0.69 %	351
S09.90XA	Unspecified injury of head, initial encounter	375	0.68 %	368
K52.9	Noninfective gastroenteritis and colitis, unspecified	320	0.58 %	310
R11.10	Vomiting, unspecified	311	0.56 %	301
J10.1	Influenza due to other identified influenza virus with other respiratory manifestations	308	0.56 %	297
B34.9	Viral infection, unspecified	261	0.47 %	257
S01.81XA	Laceration without foreign body of other part of head, initial encounter	255	0.46 %	252



Inpatient Medicaid Ages 5-11

ICD-10		Number of Encounters	Percent of Encounters of Age Grouping	Number of Patients
All	All Encounters	386	1.24 %	324
J45.41	Moderate persistent asthma with (acute) exacerbation	9	0.03 %	9
J45.42	Moderate persistent asthma with status asthmaticus	9	0.03 %	9
R56.9	Unspecified convulsions	9	0.03 %	9
E10.10	Type 1 diabetes mellitus with ketoacidosis without coma	8	0.03 %	8
S42.412A	Displaced simple supracondylar fracture without intercondylar fracture of left humerus, initial encounter for closed fracture	8	0.03 %	8
E86.0	Dehydration	7	0.02 %	7
G40.909	Epilepsy, unspecified, not intractable, without status epilepticus	7	0.02 %	7
S42.411A	Displaced simple supracondylar fracture without intercondylar fracture of right humerus, initial encounter for closed fracture	7	0.02 %	7
A41.9	Sepsis, unspecified organism	6	0.02 %	6
J45.32	Mild persistent asthma with status asthmaticus	6	0.02 %	6



### Inpatient No Medicaid Ages 5-11

ICD-10		Number of Encounters	Percent of Encounters of Age Grouping	Number of Patients
All	All Encounters	231	0.74 %	208
K35.80	Unspecified acute appendicitis	8	0.03 %	8
S42.412A	Displaced simple supracondylar fracture without intercondylar fracture of left humerus, initial encounter for closed fracture	6	0.02 %	6
E10.10	Type 1 diabetes mellitus with ketoacidosis without coma	5	0.02 %	5
J18.9	Pneumonia, unspecified organism	5	0.02 %	5
J18.1	Lobar pneumonia, unspecified organism	4	0.01 %	4
J45.42	Moderate persistent asthma with status asthmaticus	4	0.01 %	4
K04.7	Periapical abscess without sinus	4	0.01 %	4
K59.00	Constipation, unspecified	4	0.01 %	4
S42.411A	Displaced simple supracondylar fracture without intercondylar fracture of right humerus, initial encounter for closed fracture	4	0.01 %	4
D70.9	Neutropenia, unspecified	3	0.01 %	2

### Emergency Department Medicaid Ages 5-11

ICD-10		Number of Encounters	Percent of Encounters of Age Grouping	Number of Patients
All	All Encounters	21106	68.06 %	12178
J02.0	Streptococcal pharyngitis	2228	7.18 %	1942
J06.9	Acute upper respiratory infection, unspecified	1217	3.92 %	1106
J02.9	Acute pharyngitis, unspecified	1163	3.75 %	1079
J10.1	Influenza due to other identified influenza virus with other respiratory manifestations	779	2.51 %	763
K59.00	Constipation, unspecified	631	2.03 %	565
J45.901	Unspecified asthma with (acute) exacerbation	370	1.19 %	303
B34.9	Viral infection, unspecified	341	1.1 %	328
K52.9	Noninfective gastroenteritis and colitis, unspecified	314	1.01 %	304
N39.0	Urinary tract infection, site not specified	265	0.85 %	245
R11.10	Vomiting, unspecified	249	0.8 %	245



### Emergency Department No Medicaid Ages 5-11

ICD-10		Number of Encounters	Percent of Encounters of Age Grouping	Number of Patients
All	All Encounters	9289	29.95 %	7060
J02.0	Streptococcal pharyngitis	683	2.2 %	636
J06.9	Acute upper respiratory infection, unspecified	337	1.09 %	322
K59.00	Constipation, unspecified	320	1.03 %	294
J02.9	Acute pharyngitis, unspecified	317	1.02 %	296
J10.1	Influenza due to other identified influenza virus with other respiratory manifestations	292	0.94 %	285
S09.90XA	Unspecified injury of head, initial encounter	211	0.68 %	209
S01.81XA	Laceration without foreign body of other part of head, initial encounter	172	0.55 %	172
J05.0	Acute obstructive laryngitis [croup]	153	0.49 %	143
R50.9	Fever, unspecified	151	0.49 %	146
B34.9	Viral infection, unspecified	124	0.4 %	123

### Inpatient Medicaid Ages 11-17

ICD-10		Number of Encounters	Percent of Encounters of Age Grouping	Number of Patients
All	All Encounters	1049	2.88 %	845
F32.9	Major depressive disorder, single episode, unspecified	113	0.31 %	110
F32.2	Major depressive disorder, single episode, severe without psychotic features	106	0.29 %	95
F33.2	Major depressive disorder, recurrent severe without psychotic features	60	0.16 %	50
E10.10	Type 1 diabetes mellitus with ketoacidosis without coma	24	0.07 %	19
O48.0	Post-term pregnancy	19	0.05 %	19
F43.21	Adjustment disorder with depressed mood	17	0.05 %	17
F34.81	Disruptive mood dysregulation disorder	12	0.03 %	12
F33.3	Major depressive disorder, recurrent, severe with psychotic symptoms	11	0.03 %	10
A41.9	Sepsis, unspecified organism	10	0.03 %	10
F31.9	Bipolar disorder, unspecified	10	0.03 %	9



### Inpatient No Medicaid Ages 11-17

ICD-10		Number of Encounters	Percent of Encounters of Age Grouping	Number of Patients
All	All Encounters	821	2.26 %	653
F32.2	Major depressive disorder, single episode, severe without psychotic features	113	0.31 %	88
F32.9	Major depressive disorder, single episode, unspecified	95	0.26 %	93
F33.2	Major depressive disorder, recurrent severe without psychotic features	41	0.11 %	40
K35.80	Unspecified acute appendicitis	17	0.05 %	17
F32.1	Major depressive disorder, single episode, moderate	15	0.04 %	12
Z51.11	Encounter for antineoplastic chemotherapy	15	0.04 %	5
F33.1	Major depressive disorder, recurrent, moderate	10	0.03 %	9
F43.21	Adjustment disorder with depressed mood	10	0.03 %	10
F32.3	Major depressive disorder, single episode, severe with psychotic features	9	0.02 %	7
R45.851	Suicidal ideations	9	0.02 %	9

### Emergency Department Medicaid Ages 11-17

ICD-10		Number of Encounters	Percent of Encounters of Age Grouping	Number of Patients
All	All Encounters	20716	56.94 %	11761
J02.0	Streptococcal pharyngitis	934	2.57 %	855
J02.9	Acute pharyngitis, unspecified	898	2.47 %	825
J06.9	Acute upper respiratory infection, unspecified	709	1.95 %	669
R45.851	Suicidal ideations	496	1.36 %	398
J10.1	Influenza due to other identified influenza virus with other respiratory manifestations	411	1.13 %	405
K59.00	Constipation, unspecified	380	1.04 %	349
R51	Headache	320	0.88 %	289
F32.9	Major depressive disorder, single episode, unspecified	291	0.8 %	270
B34.9	Viral infection, unspecified	263	0.72 %	257
S09.90XA	Unspecified injury of head, initial encounter	257	0.71 %	250



Emergency Department No Medicaid Ages 11-17

ICD-10		Number of Encounters	Percent of Encounters of Age Grouping	Number of Patients
All	All Encounters	13793	37.91 %	9901
J02.9	Acute pharyngitis, unspecified	396	1.09 %	369
R45.851	Suicidal ideations	356	0.98 %	301
J02.0	Streptococcal pharyngitis	325	0.89 %	303
S09.90XA	Unspecified injury of head, initial encounter	276	0.76 %	274
K59.00	Constipation, unspecified	273	0.75 %	250
F32.9	Major depressive disorder, single episode, unspecified	268	0.74 %	249
J06.9	Acute upper respiratory infection, unspecified	253	0.7 %	246
R51	Headache	217	0.6 %	207
S93.401A	Sprain of unspecified ligament of right ankle, initial encounter	208	0.57 %	203
R55	Syncope and collapse	205	0.56 %	196





### Inpatient Top 3 Diagnoses

ICD-10		Number of Encounters	Number of Patients
F32.2	Major depressive disorder, single episode, severe without psychotic features	219	181
F32.9	Major depressive disorder, single episode, unspecified	208	203
P59.9	Neonatal jaundice, unspecified	144	143

### Emergency Department Top 3 Diagnoses

ICD-10		Number of Encounters	Number of Patients
J06.9	Acute upper respiratory infection, unspecified	9856	8002
J02.0	Streptococcal pharyngitis	6020	5342
J02.9	Acute pharyngitis, unspecified	3586	3319

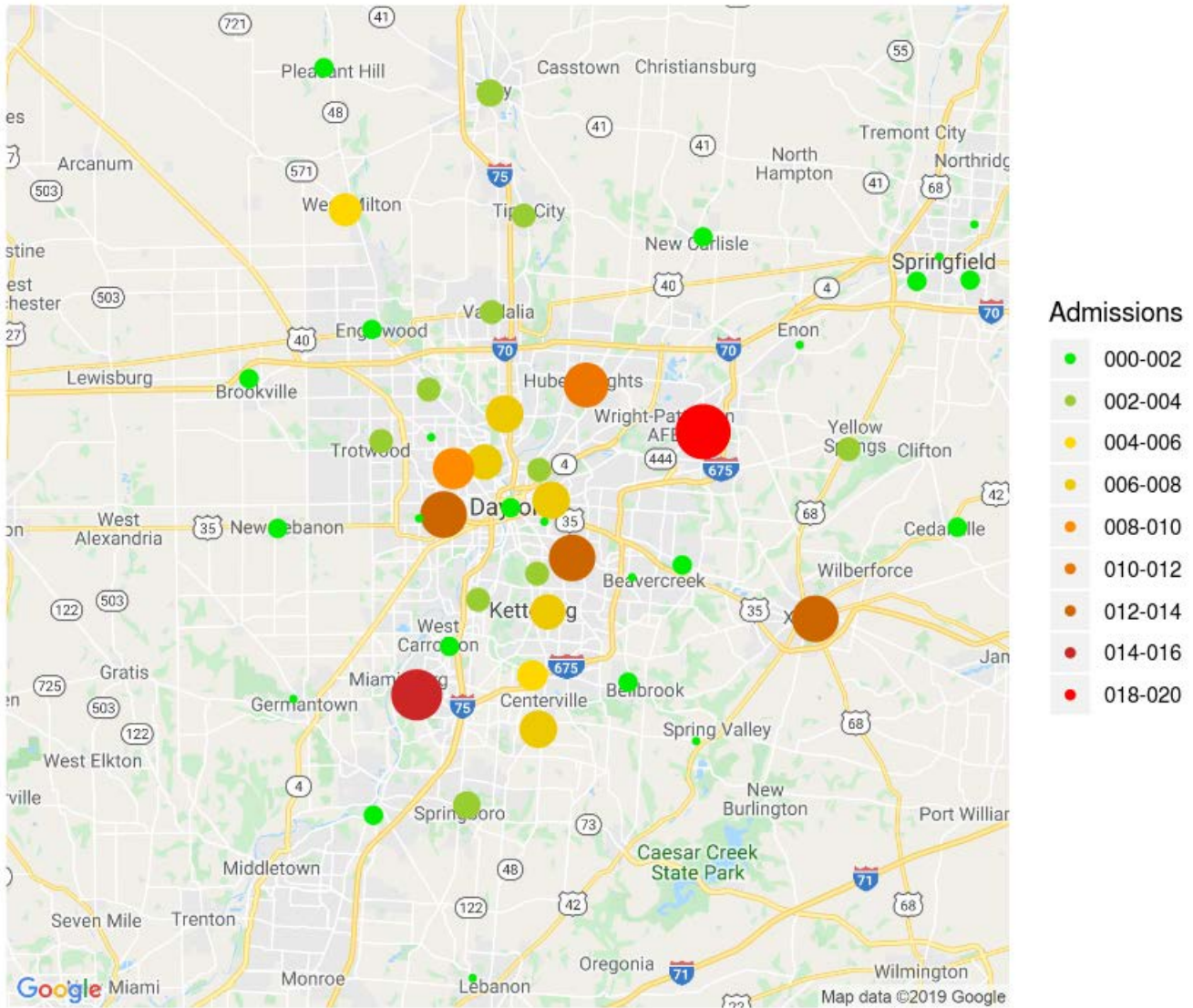


**Inpatient F32.2 (Major depressive disorder, single episode, severe without psychotic features) Top 20 Zip codes**

<b>Zip code</b>	<b>City</b>	<b>Encounters</b>
45324	Fairborn	19
45342	Miamisburg	16
45385	Xenia	13
45417	Dayton	13
45420	Dayton	13
45424	Dayton	12
45406	Dayton	10
45403	Dayton	8
45414	Dayton	8
45458	Dayton	8
45405	Dayton	7
45429	Dayton	7
45383	West Milton	6
45459	Dayton	5
45066	Springboro	4
45356	Piqua	4
45373	Troy	4
45371	Tipp City	3
45377	Vandalia	3
45387	Yellow Springs	3



## Inpatient - F32.2



*\*F32.2 - Major depressive disorder, single episode, severe without psychotic features*

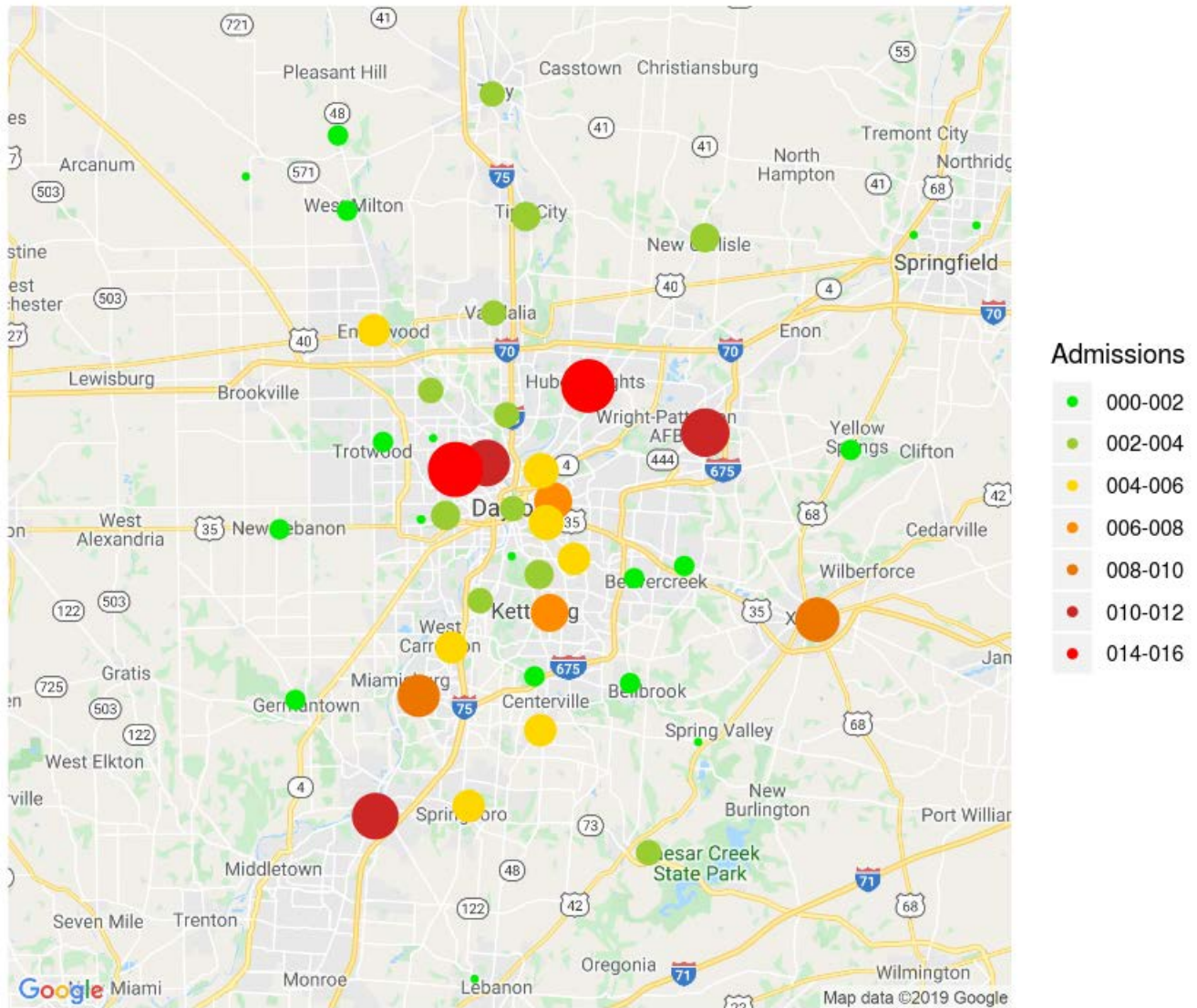


### Inpatient F32.9 (Major depressive disorder, single episode, unspecified) Top 20 Zip codes

Zip code	City	Encounters
45424	Dayton	11
45005	Franklin	9
45324	Fairborn	9
45373	Troy	7
45342	Miamisburg	6
45503	Springfield	6
45066	Springboro	5
45385	Xenia	5
45414	Dayton	5
45322	Englewood	4
45371	Tipp City	4
45419	Dayton	4
45426	Dayton	4
45458	Dayton	4
45502	Springfield	4
45356	Piqua	3
45377	Vandalia	3
45404	Dayton	3
45410	Dayton	3
45429	Dayton	3



## Inpatient - F32.9



\*F32.9 - Major depressive disorder, single episode, unspecified



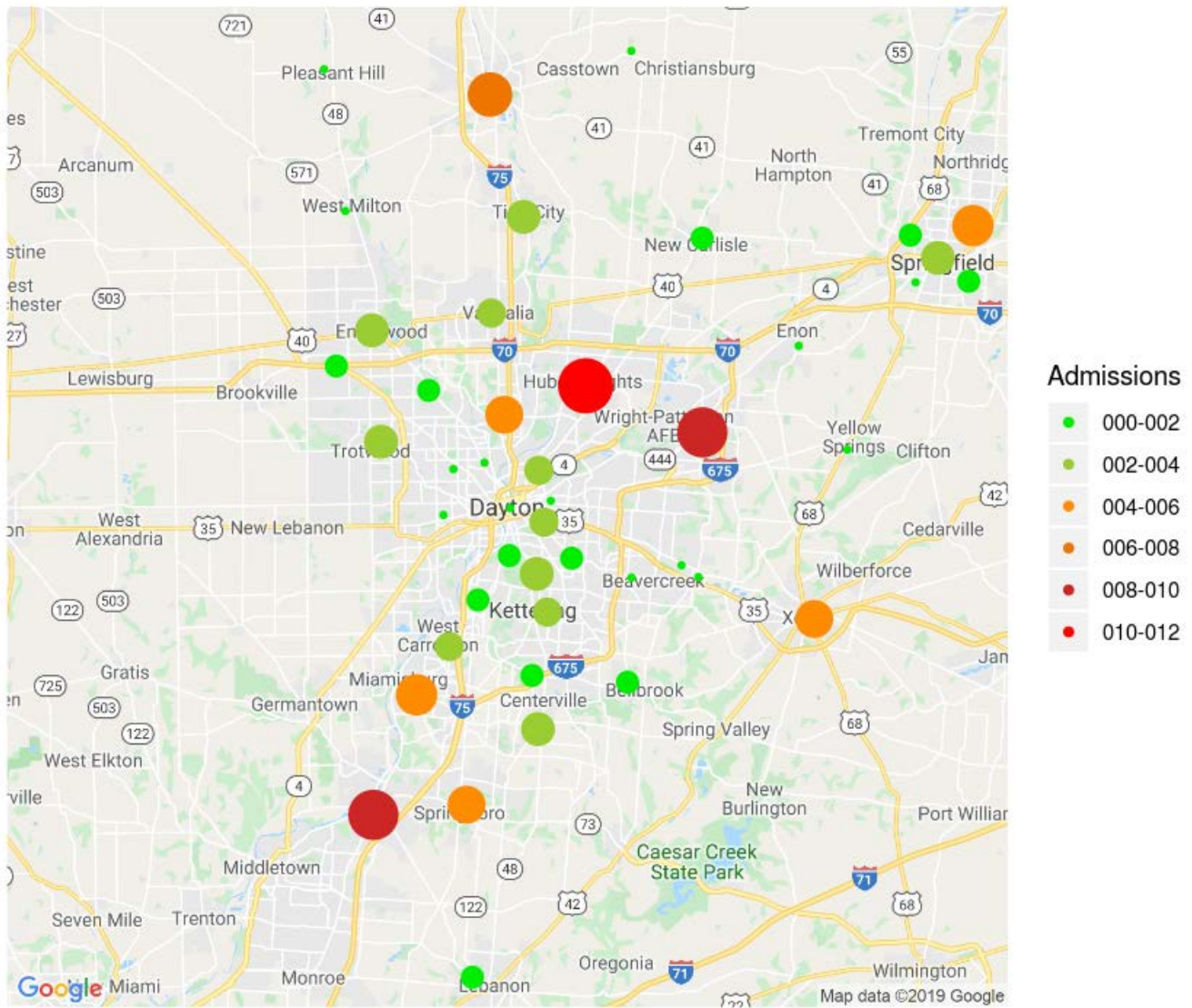
**Inpatient P59.9 (Neonatal jaundice, unspecified)  
Top 20 Zip codes**

<b>Zip code</b>	<b>City</b>	<b>Encounters</b>
45424	Dayton	11
45005	Franklin	9
45324	Fairborn	9
45373	Troy	7
45342	Miamisburg	6
45503	Springfield	6
45066	Springboro	5
45385	Xenia	5
45414	Dayton	5
45322	Englewood	4
45371	Tipp City	4
45419	Dayton	4
45426	Dayton	4
45458	Dayton	4
45502	Springfield	4
45356	Piqua	3
45377	Vandalia	3
45404	Dayton	3
45410	Dayton	3
45429	Dayton	3





## Inpatient - P59.9



\*P59.9 – Neonatal jaundice

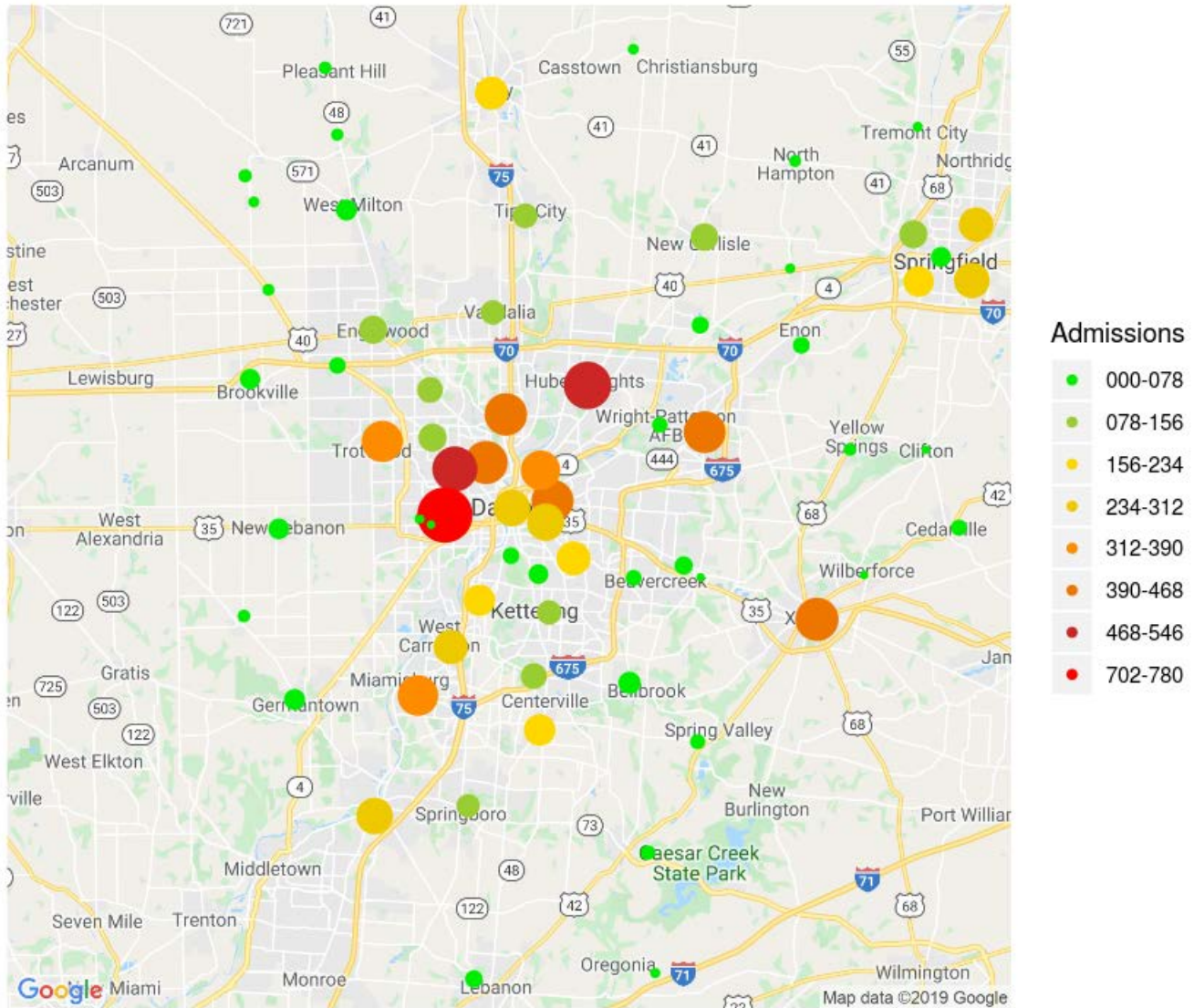


### Emergency Department J06.9 (Acute upper respiratory infection, unspecified) Top 20 Zip codes

Zip code	City	Encounters
45417	Dayton	778
45424	Dayton	542
45406	Dayton	477
45385	Xenia	432
45405	Dayton	429
45414	Dayton	412
45403	Dayton	404
45324	Fairborn	398
45426	Dayton	382
45342	Miamisburg	370
45404	Dayton	344
45410	Dayton	296
45005	Franklin	282
45402	Dayton	282
45356	Piqua	266
45505	Springfield	265
45449	Dayton	242
45503	Springfield	241
45420	Dayton	232
45373	Troy	217



## Emergency Department - J06.9



*\*J06.9 – Acute upper respiratory infection, unspecified*



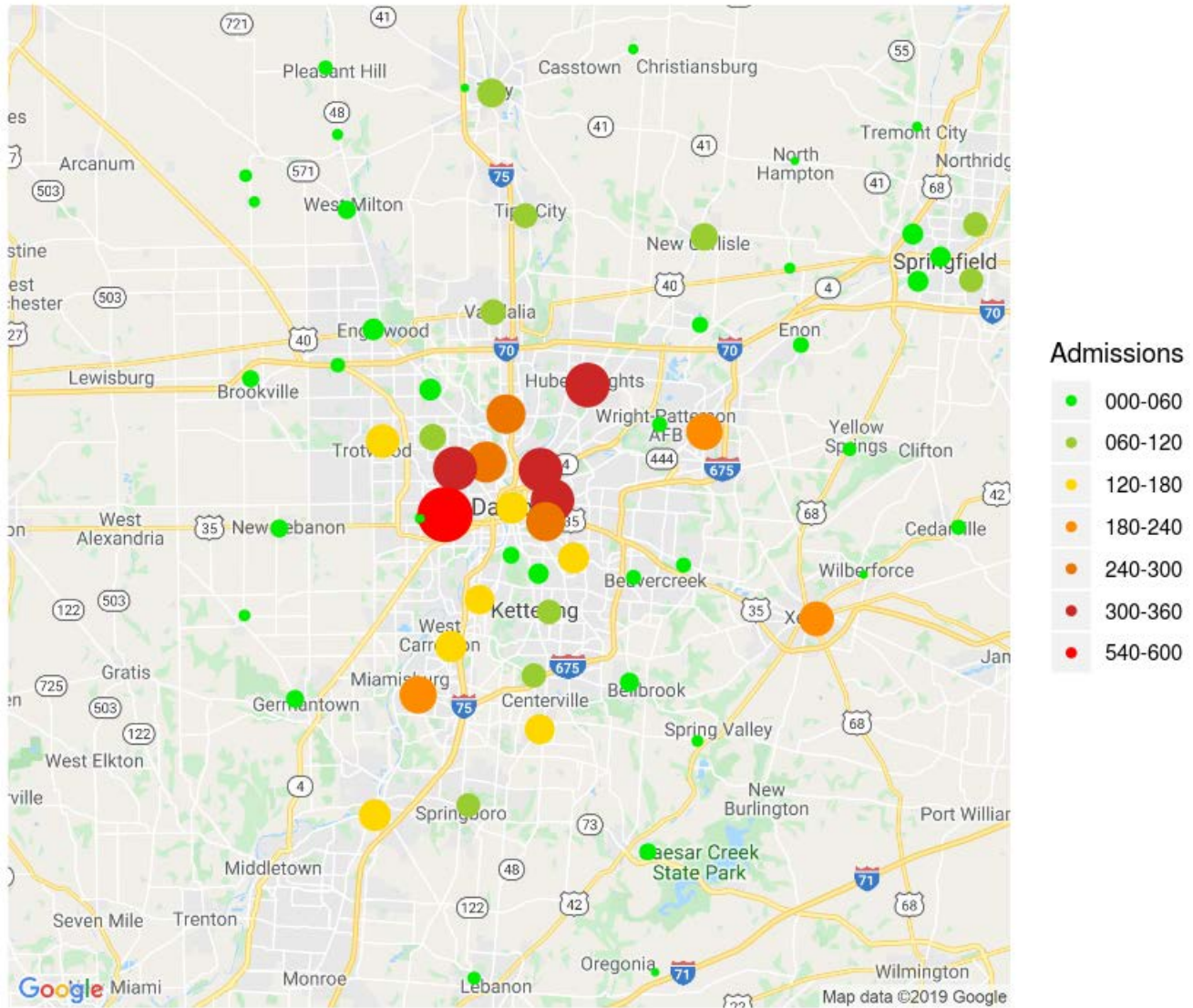
### Emergency Department J02.0 (Streptococcal pharyngitis) Top 20 Zip codes

Zip code	City	Encounters
45417	Dayton	597
45424	Dayton	359
45404	Dayton	345
45406	Dayton	345
45403	Dayton	337
45405	Dayton	292
45414	Dayton	261
45410	Dayton	260
45342	Miamisburg	230
45324	Fairborn	216
45385	Xenia	192
45426	Dayton	173
45005	Franklin	152
45402	Dayton	152
45449	Dayton	145
45420	Dayton	140
45458	Dayton	127
45439	Dayton	122
45373	Troy	117
45356	Piqua	110





## Emergency Department - J02.0



\*J02.0 – Streptococcal pharyngitis

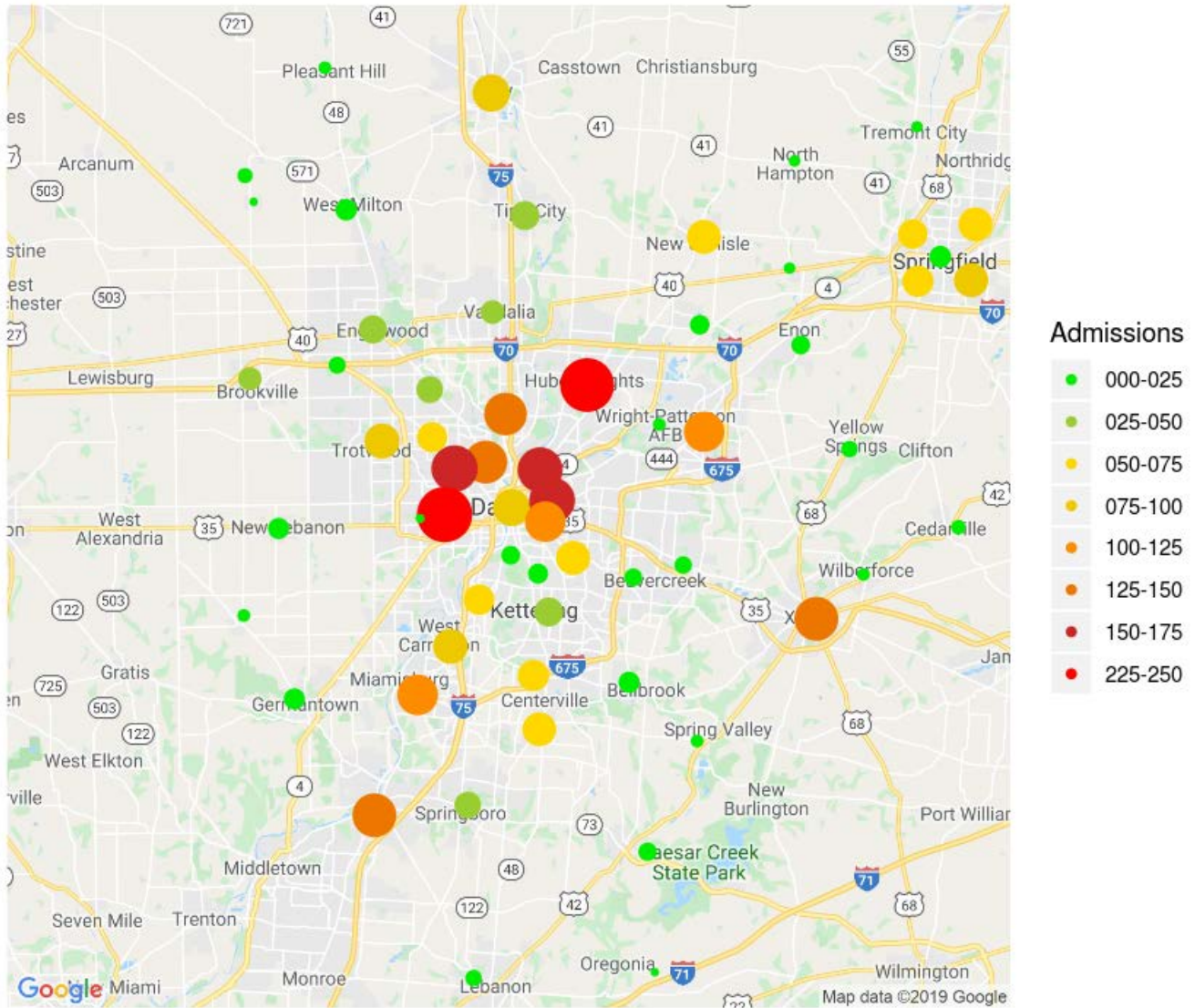


**Emergency Department J02.9 (Acute pharyngitis, unspecified)  
Top 20 Zip codes**

<b>Zip Code</b>	<b>City</b>	<b>Encounters</b>
45417	Dayton	248
45424	Dayton	232
45406	Dayton	163
45403	Dayton	158
45404	Dayton	152
45385	Xenia	143
45005	Franklin	142
45405	Dayton	135
45356	Piqua	134
45414	Dayton	133
45342	Miamisburg	119
45410	Dayton	117
45324	Fairborn	116
45373	Troy	96
45402	Dayton	93
45426	Dayton	81
45449	Dayton	80
45505	Springfield	76
45344	New Carlisle	75
45420	Dayton	75



## Emergency Department - J02.9



\*J02.9 – Acute pharyngitis, unspecified



# Appendix VI: Evaluation of Impact

## Dayton Children's Hospital Implementation Strategy: Impact Assessment

One of only 31 independent freestanding children's hospitals in the country, Dayton Children's is the region's only medical facility dedicated to children. Accredited by The Joint Commission and serving 20 Ohio counties and eastern Indiana, the experts at Dayton Children's care for more than 350,000 children each year. Consistently recognized as one of the country's best and most cost-effective pediatric hospitals, Dayton Children's is home to the Wright State University Boonshoft School of Medicine, Department of Pediatrics and together with the United States Air Force shares the nation's only civilian-military integrated pediatric training program.

The hospital's last assessment and corresponding Implementation Strategy was adopted by Dayton Children's Hospital Board of Trustees in June 2017. Upon review of the 2017 Community Health Needs Assessment, hospital leadership, with input from the community, isolated three top priority community health needs in alignment with the Public Health Dayton and Montgomery County Community Health Improvement Plan and the State of Ohio Health Improvement Plan:

1. Improve Mental Health and Addiction Outcomes
2. Improve Chronic Disease Outcomes
3. Improve Maternal and Infant Health Outcomes

With these goals in-hand, action plans were created to leverage the hospitals' staff expertise and resources to combat each community health issue. Below is outlined what actions were taken along with a high-level assessment of the impact of those actions. For the full Implementation Plan Update visit:

<https://www.childrensdayton.org/community/community-health/community-health-needs-assessment>

To work toward **improving mental health and addiction outcomes**, these were the recommended strategies and outcomes:

1. Execute plan to create a psychiatry unit in Dayton Children's
  - The 24-bed behavioral health unit opened in July 2019. The unit provides the most up-to-date technology and resources to help children and teens stabilize. Since opening, the unit has had over 4,000 patient days.
2. Promote trauma-informed health care
  - After conducting an internal needs assessment, the hospital's trauma-informed care committee prioritized caregivers of children hospitalized in the ICU. A "stress thermometer" project was piloted in the pediatric ICU in Fall 2019. The tool implementation resulted in increased utilization of hospital programs and services and helped identify additional and unique ways in which to support families in the PICU. It also empowered nursing staff with more options to offer families and raised awareness of the mental health needs of caregivers.

To work toward **improving chronic disease outcomes**, these were the recommended strategies and outcomes:

1. Implement nutrition policy in schools
  - Dayton Children's collaborated with local groups to support local childcare centers working to obtain certification by the Ohio Healthy Program (OHP). Dayton Children's childcare center became OHP certified. The hospital's work in this strategy pivoted in years two and three to ensure children were receiving healthy food options when they were not in school. Dayton Children's partnered with Public Health Dayton and Montgomery County to develop a communication campaign to promote existing summer feeding sites and the hospital hosted a web site for consumers to find summer food service program options in Montgomery County.

## 2. Implement Safe Routes to School

- Dayton Children's collaborated with several local organizations to improve walking and biking infrastructure for children. The Safe Routes to Schools Large District Travel Plan was passed in July 2018 by the Dayton City Commission. After the travel plan was boarded, the City of Dayton received infrastructure funds from the state to complete various projects listed in the plan. Dayton Children's supported several Safe Routes to Schools programs including Girls in Gear, Walk to School and Bike to School events. In September 2019, Dayton Children's received the Safe Routes to Schools non-infrastructure grant from the Ohio Department of Transportation to expand education.

## 3. Enhance the Dayton Asthma Alliance

- The Dayton Asthma Alliance, convened by Dayton Children's, is a group of over 15 community partners working to improve outcomes for children with Asthma. The Alliance employs a dedicated community health worker to conduct home visits for children/families in the pulmonary clinic and Dayton Children's Pediatrics. The Alliance was supportive of the Tobacco 21 legislation passed at the statewide level in summer 2019. The Alliance engaged with several Dayton Public Schools and Huber Heights Schools to run the Open Airways self-management program. This program trains children about asthma triggers and healthy choices to manage their asthma. The Alliance is aligning with Dayton Children's Health Partners, the hospital's clinically integrated network, around primary care quality metrics related to asthma. The network is working on a co-management agreement between Dayton Children's and primary care physicians to better manage asthma. Dayton Children's partnered with Miami Valley Child Development Centers and Preschool Promise to train staff in asthma and give basic education on home triggers.

To work toward **improving maternal and infant health**, these were the recommended strategies and outcomes:

### 1. Increase the use of safe sleep practices

- Dayton Children's coordinates the Cribs for Kids program distributing over 375 pack n' plays since July 2017. Dayton Children's has a GOLD certification from Cribs for Kids. The hospital has developed several policies to meet this certification including safe sleep modeling and conducting regular audits of safe sleep practices being used by staff and patient families. The hospital's internal Infant Mortality and Awareness Prevention Committee (IMAP) created a mandatory online learning module for all Dayton Children's staff to learn about safe sleep practices. Representatives from Dayton Children's sit on multiple community-based committees related to Infant Mortality through Public Health Dayton and Montgomery County. The hospital has been collaborating specifically to develop the County's Safe Sleep Champions program.

To address most priority areas, the following **cross-cutting strategies** were recommended with outcomes met.

### 1. Increase breastfeeding

- Dayton Children's partnered with the Greater Miami Valley Breastfeeding Coalition to develop and implement medical resident education around breastfeeding. Dayton Children's updated EPIC documentation to reflect breastfeeding as a standard of care. This project improved clinic flow and education for nursing and support staff to establish better support of breastfeeding. Dayton Children's revised much of the Safe Sleep training and marketing materials to reflect proper breastfeeding practices.

### 2. Promote a regional childhood vaccination campaign.

- Dayton Children's created a program that offered parents and caregivers of inpatients the opportunity to get the flu shot while on campus. In addition, baseline data was collected on how many children had received the flu which will be used to spread the campaign to more children and families in future years.

3. Explore and implement screenings to address social and behavioral needs

- Dayton Children's Family Resource Connection conducted 17,058 (positive and negative) screens to date with 35 percent of screens indicating a social need. The program has a 38 percent connection to resource rate. In May 2019, the Family Resource Connection and Dayton Children's Pediatrics co-located services at the Child Health Pavilion resulting in an increased referral and connection rate. In 2019, Dayton Children's completed its participation in a national Collaborative to Advance Social Health Integration Institute for Healthcare Improvement (CASHI) through the Health Leads organization. The Family Resource Connection utilized several quality improvement strategies learned from this collaborative to improve screening and expand programming.

4. Integrate community health workers into clinical services

- Dayton Children's employs a community health worker who is imbedded in the pulmonary clinic. In addition, through a contract with ODJFS, Dayton Children's employs two Kinship Navigators who assist kinship families in caring for children. In 2018, Dayton Children's received a grant from the HealthPath Foundation and hired an additional community health worker to support the complex care clinic. In May 2019, the Child Health Pavilion opened offering primary care and outpatient specialty services to the community. The Community Health Workers relocated into this space for greater integration with clinics. Dayton Children's also explored the Pathways HUB models to identify pathways that community health workers could use with clients to reach optimal health outcomes while being compensated by managed care companies. This work set a foundation for Dayton to adopt the model city-wide to support high-risk mothers and promote better birth outcomes with plans to support broader populations of families in need.

5. Implement a food insecurity screening and referral program

- Dayton Children's Pediatrics is universally screening using the 2-item Food Insecurity Tool. In addition, the nutrition clinic began using the 2-items screen along with the other social needs screening questions. After clinics moved to the Child Health Pavilion in Summer 2019, the hospital has added additional clinics including the foster/kinship clinic, Healthy Me Clinic and Developmental Behavioral Pediatrics. In addition to referrals to community resources, the hospital also refers families to the Community Teaching Kitchen. This is a brand-new kitchen housed in the Child Health Pavilion that is the center for cooking and nutrition education. Classes are held every week and are open to the public and other nonprofit groups that are looking to engage staff, families, and kids around healthy food.

6. Implement a food pharmacy program

- May 2019, the Child Health Pavilion opened housing the new Food "Pharm." The Food Bank boxes are now stored next to both the Family Resource Connection and Dayton Children's Pediatrics allowing for true integration of these programs. Families screened in clinic can now receive food as part of their clinic visit. Approximately 77 boxes a month are provided to families.

## Influence of Dayton Children's Hospital Over the Last Three Years

To better evaluate Dayton Children's performance on the 2017 Community Health Needs Assessment, interviews were conducted with community leaders that serve the youth population in the Greater Dayton area. Some key themes surfaced on the influence of Dayton Children's Hospital and its impact on children's health.

The 2017 Community Needs Assessment and Implementation Strategy identified and address three key health issues: mental health, infant mortality, and chronic disease. Community leaders identified highlights of how these issues have been addressed:

- Mental health
  - Dayton Children's opened an inpatient pediatric behavioral health unit in 2019, this is the only unit like this in the area and treats children with mental health crisis here in the Miami valley close to their families.
    - *"Dayton Children's has done a great job in opening up the mental health area of the hospital that we can send kids there when there's a crisis"* - Rhonda Merces, ECHO (Empowering Children with Hope and Opportunity)
  - Dayton Children's started trauma-informed care for medical providers. This allows for emotional support of children and their families and has been beneficial in the school system as well.
    - *"Trauma informed practices and mental health needs and Dayton Children's is already doing this as ... I have seen this has made such a difference; I think we can spread this epically when I think of mental health providers."* - Heather Koehl, Montgomery County Educational Services Center
- Infant mortality
  - Dayton Children's emphasized safe sleep as well as other educational programs for new mothers. This is done relationship with community groups and local health departments.
    - *"I've seen advancement in infant mortality there seems to be such a strong emphasis on education and resources of pregnant moms"* - Anita Biles, Miami Valley Child Development Centers
- Chronic disease
  - The Dayton Asthma Alliance is a multidisciplinary and cross-sector approach to treatment and management of asthma, it includes programs to try and improve children's home environment as well as education plans in the school system.
    - *"The Dayton Asthma Alliance bringing the community collaboration together seen a lot of influence in the past three years"* - Dawn Abbott, Dayton Public Schools

The Center for Community Health and Advocacy, located in the hospital's new Child Health Pavilion, became the home of community health programming during the last three years. The Center broadens and accelerates community health efforts already underway to serve children who have experienced abuse, trauma, poverty, complex medical issues and abandonment, while aligning those services, joining forces with community partners and supporting new endeavors to improve the health status of children.

- *"I think probably the biggest influences that I've seen is with the creation of the Child Health Pavilion it's very necessary and useful wraparound service to treat people as whole people."* - Nate Arnett, Five Rivers Metroparks
- *"One of the thing I learned recently that I did not know about with Pavilion is some of the outreach programs I think that's wonderful and should continue and fits with my ideal of prevention and educating and reaching out to families prior to illness."* - Heather Koehl, Montgomery County Educational Services Center

Dayton Children's Hospital are leaders in the community by the key informants. They are a corner stone in the community and a trusted source of medical information for children.

- *"Dayton Children's certainly viewed as the leaders in the community."* - Nate Arnett, Five Rivers Metro Parks