

2016

Community Health Needs Assessment DETAILED DATA INDEX



Akron Children's Hospital
One Perkins Square
Akron, OH 44308

www.akronchildrens.org



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Introduction

To conduct the 2016 Community Health Needs Assessment, the Kent State University College of Public Health (KSU) followed several recommendations offered by the Catholic Health Association of the United States in its 2015 second edition of Assessing and Addressing Community Health Needs. This Data Appendix includes epidemiological data for the indicators that were identified as significant health needs for the hospital service area.

Epidemiologic data from a variety of sources were collected on a large number of child health indicators where available. To identify the epidemiological significant health needs for Akron Children's Hospital, child data from each of the six counties in the Akron Children's Hospital service area was compared to two peer counties in Ohio that were demographically similar, the state and US averages, and the Healthy People 2020 target, if one was available.

Identification of a significant health issue is demonstrated with this example using Summit County. Indicators listed on the left-hand side of the matrix compared unfavorably to the two comparison counties, the state, and the US. Indicators on the right-hand side of the matrix compared favorably to those benchmarks. In addition, on each side of the matrix, it was noted if the indicators were higher/lower than 2, 3, or 4 of the benchmarks.

For example, indicators in the upper left box of the matrix (shaded in red) were "worse" in Summit County compared to the two comparison counties, the State, and the US. Indicators in the bottom right (shaded in blue) were "better" in Summit County compared to these benchmarks. The use of this classification system helped KSU quickly compare the vast amount of data to key benchmarks and identify the significant health needs. At a meeting of the three hospital systems on May 1, 2016 it was agreed that any epidemiological indicator that was "worse" on 3 or more benchmarks would be considered a "significant health need". These indicators are described and detailed data presented on each for the hospital's entire service area in the pages that follow.

Summit County Children (Example)			
Unfavorable Comparisons		Favorable Comparisons	
4 Benchmarks	<ul style="list-style-type: none">Indicator 1Indicator 2Indicator 3	<ul style="list-style-type: none">Indicator 10Indicator 11Indicator 12	4 Benchmarks
3 Benchmarks	<ul style="list-style-type: none">Indicator 4Indicator 5Indicator 6	<ul style="list-style-type: none">Indicator 13Indicator 14Indicator 15	3 Benchmarks
2 Benchmarks	<ul style="list-style-type: none">Indicator 7Indicator 8Indicator 9		

AKRON CHILDREN’S MAIN CAMPUS CHILD INDICATORS

Access to Healthcare

Access to healthcare is a broad term used to describe the availability, acceptability, affordability, and accessibility of healthcare systems and providers. Lack of access to healthcare makes it difficult for people to get the care they need, which can lead to acute and/or prolonged sickness, premature disability, and even death. With respect to children, access to healthcare is vital to ensure proper development. While family insurance coverage, as well as governmental assistance programs such as The Children’s Health Insurance Program (CHIP), reduce barriers to care, merely having insurance coverage does not guarantee that children will be able to access that care (Clemans-Cope et al. 2015).

The access to healthcare issues identified as significant health needs in the Akron Children's Hospital service area are:

- Access to dental care
- Dental insurance coverage
- Mental health insurance coverage
- Vision insurance coverage

Percentage of 3rd Graders with Untreated Tooth Decay

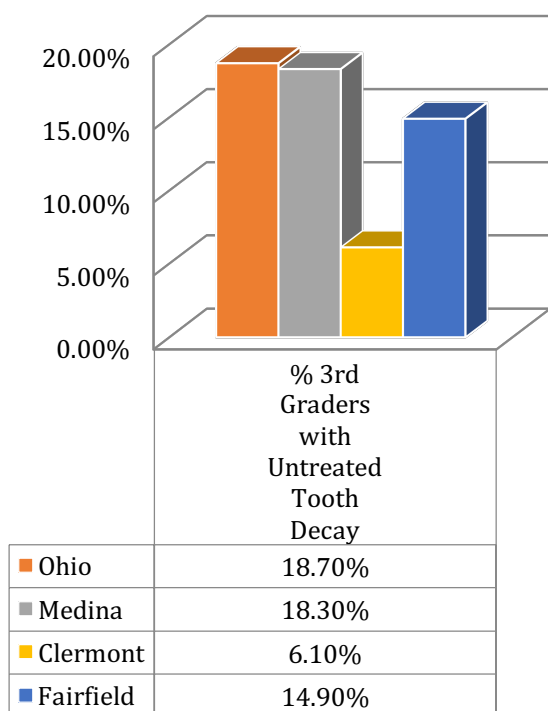
What is the data source for this indicator?

“Percentage of Third Graders with Untreated Tooth Decay” is the percentage of third graders with untreated tooth decay based on clinical study. The most recent data (2010) is utilized here, which is provided by the Ohio Department of Health’s Oral Health and BMI Survey, is available at www.datacenter.kidscount.org.

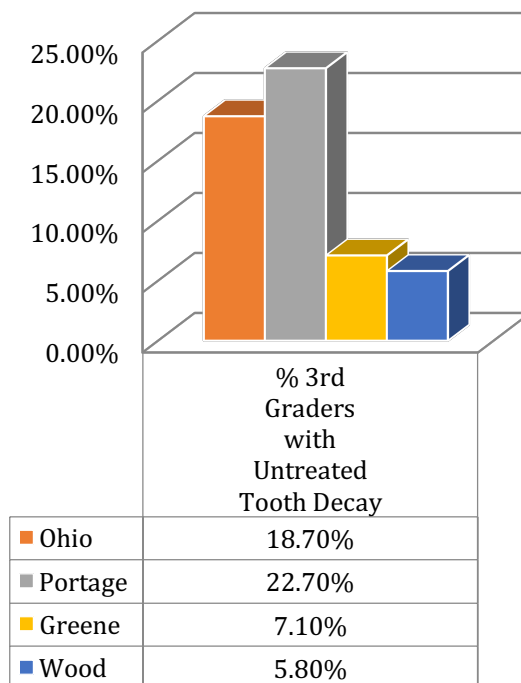
How does our community rank?

The “Percentage of Third Graders with Untreated Tooth Decay” in Portage, Stark, and Wayne counties all exceeded the state and both comparison county percentages. Medina, Summit, and Richland counties did not meet the methodological criteria for identification as a significant health need. A Healthy People 2020 goal and national percentage were not available.

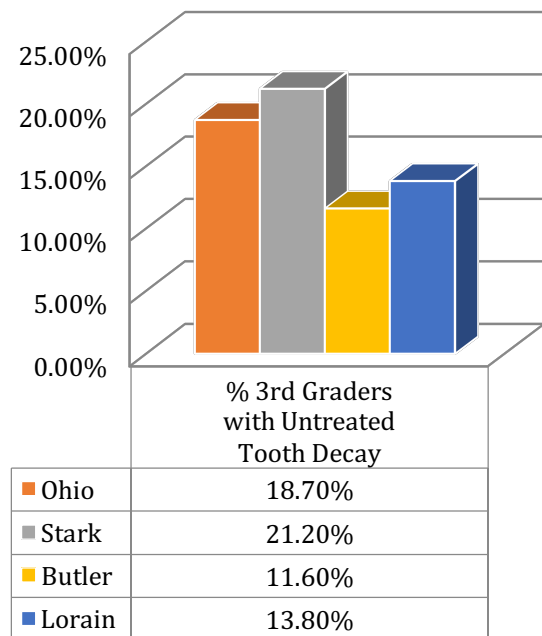
**Medina County
Percentage of 3rd Graders
with Untreated Tooth Decay**



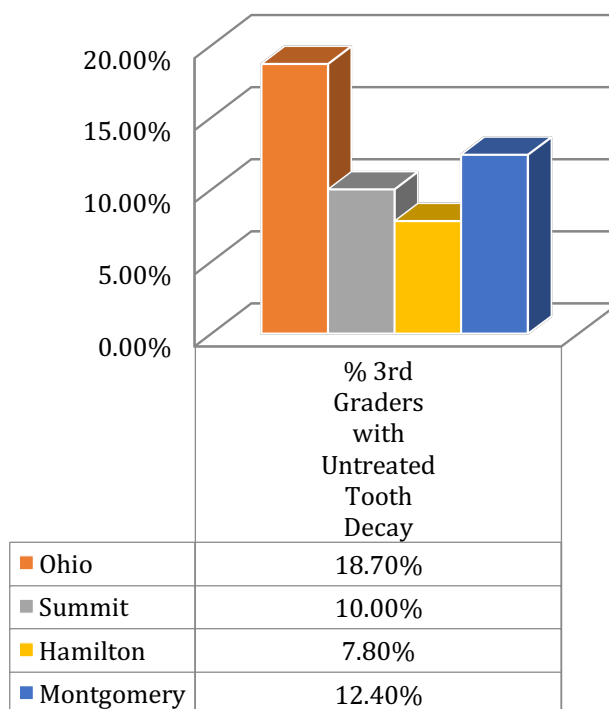
**Portage County
Percentage of 3rd Graders
with Untreated Tooth Decay**



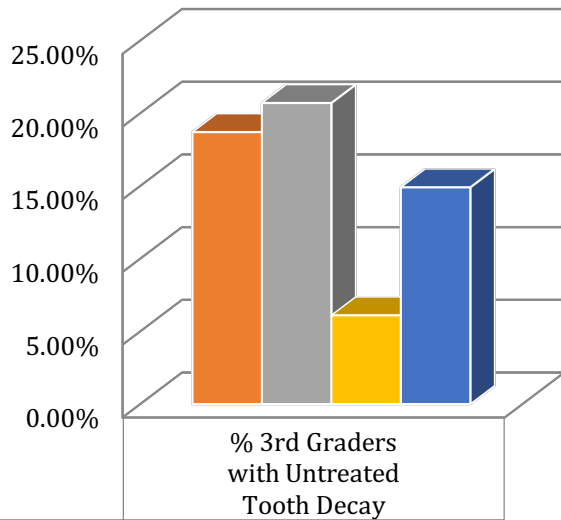
**Stark County
Percentage of 3rd Graders
with Untreated Tooth Decay**



**Summit County
Percentage of 3rd Graders
with Untreated Tooth Decay**

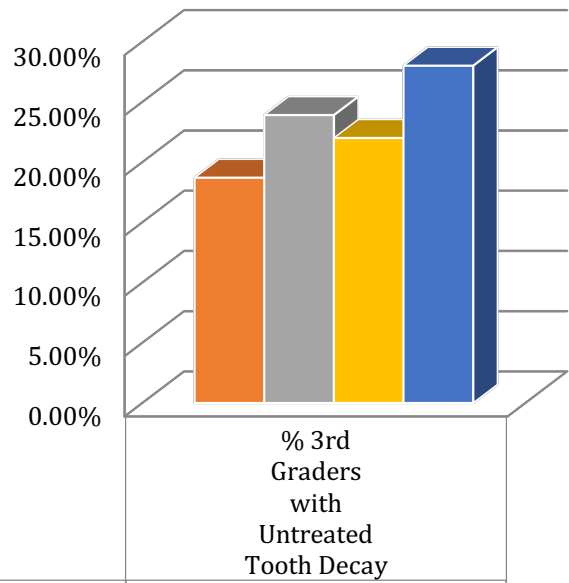


**Wayne County
Percentage of 3rd Graders
with Untreated Tooth Decay**



Ohio	18.70%
Wayne	20.70%
Clermont	6.10%
Fairfield	14.90%

**Richland County
Percentage of 3rd Graders
with Untreated Tooth Decay**



Ohio	18.70%
Richland	23.90%
Trumbull	22.00%
Columbiana	28.00%

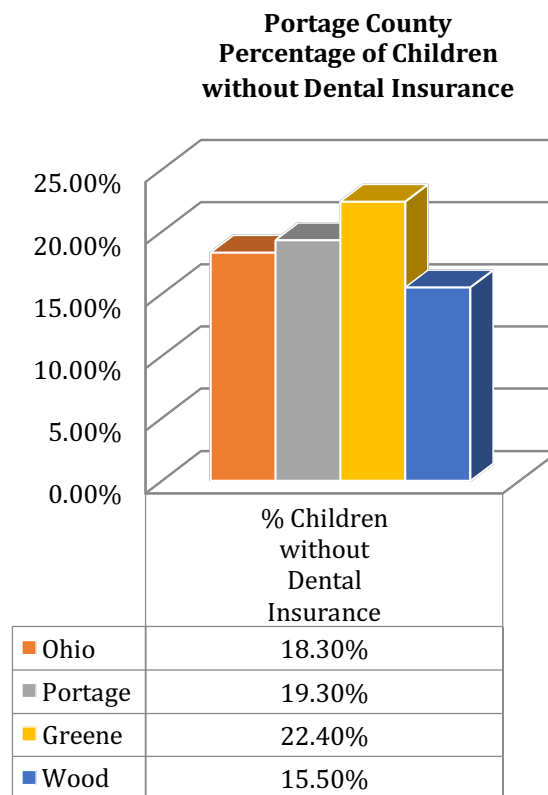
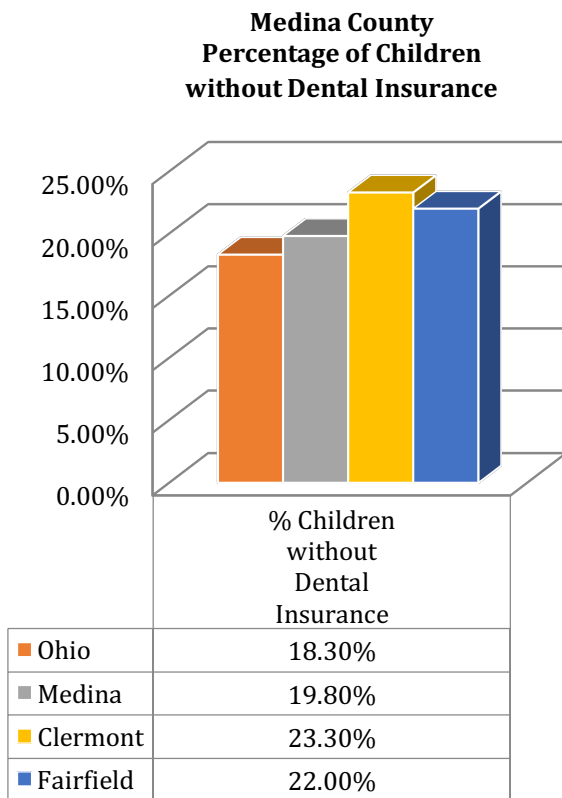
Percentage of Children without Dental Insurance

What is the data source for this indicator?

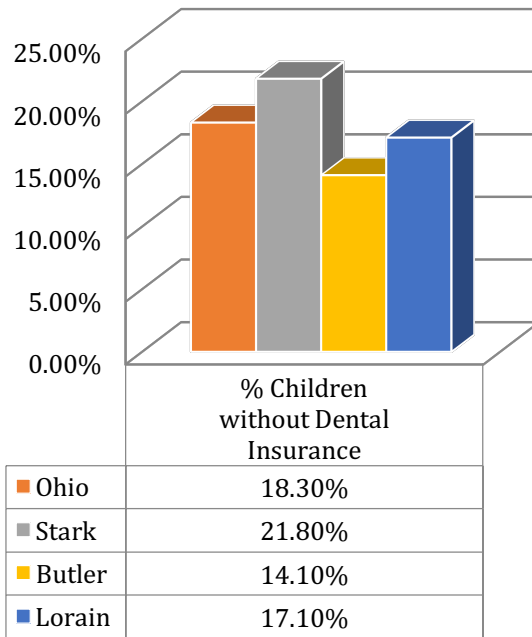
“Percentage of Children without Dental Insurance” is an estimate of the uninsured rates for children under the age of 18 for dental insurance, excluding 1-year-olds. The most recent data (2008) is utilized here, which is provided by The Ohio Colleges of Medicine Government Resource Center, is available at www.datacenter.kidscount.org.

How does our community rank?

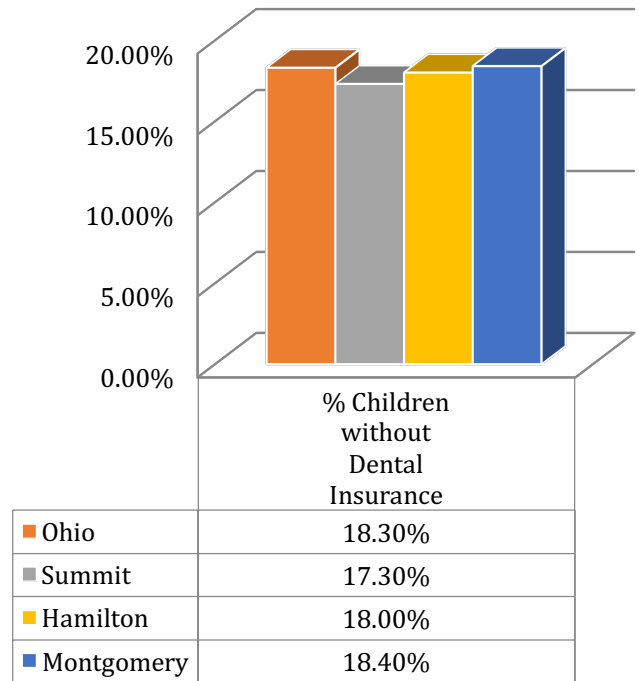
The “Percentage of Children without Dental Insurance” in Stark, Wayne, and Richland counties exceeded the state and both comparison county percentages. Medina, Portage, and Summit counties did not meet the methodological criteria for identification as a significant health need. A Healthy People 2020 goal and national percentage were not available.



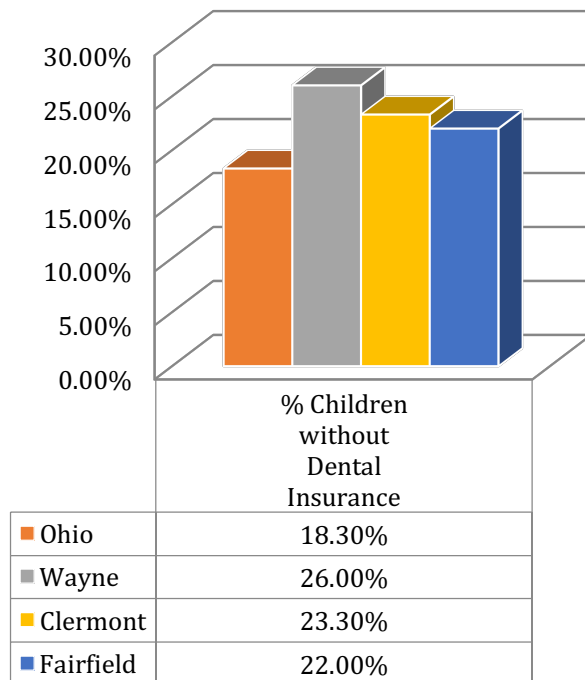
**Stark County
Percentage of Children
without Dental Insurance**



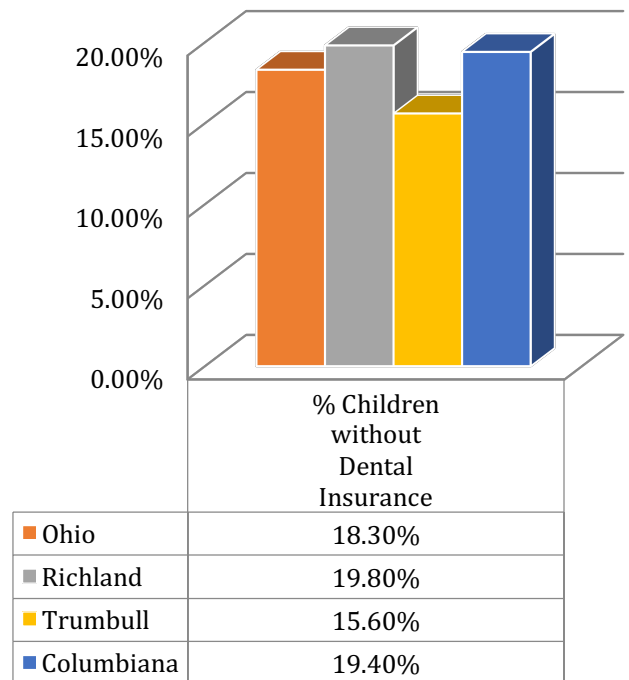
**Summit County
Percentage of Children
without Dental Insurance**



**Wayne County
Percentage of Children
without Dental Insurance**



**Richland County
Percentage of Children
without Dental Insurance**



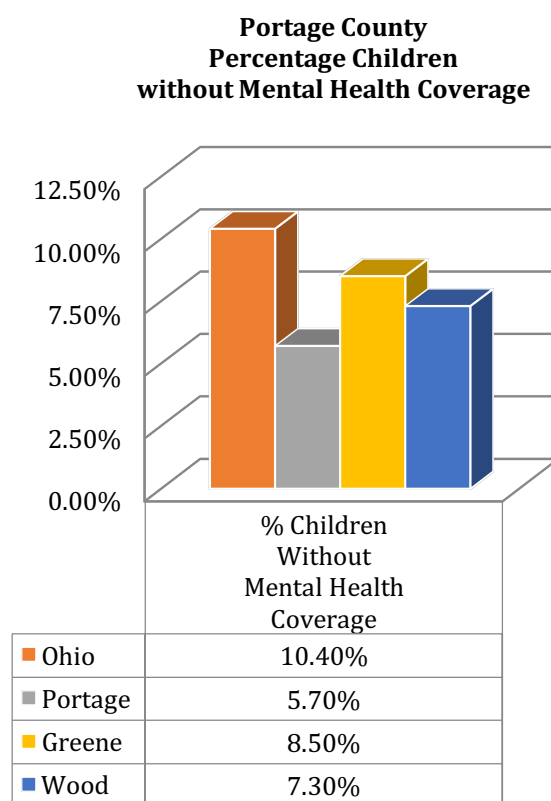
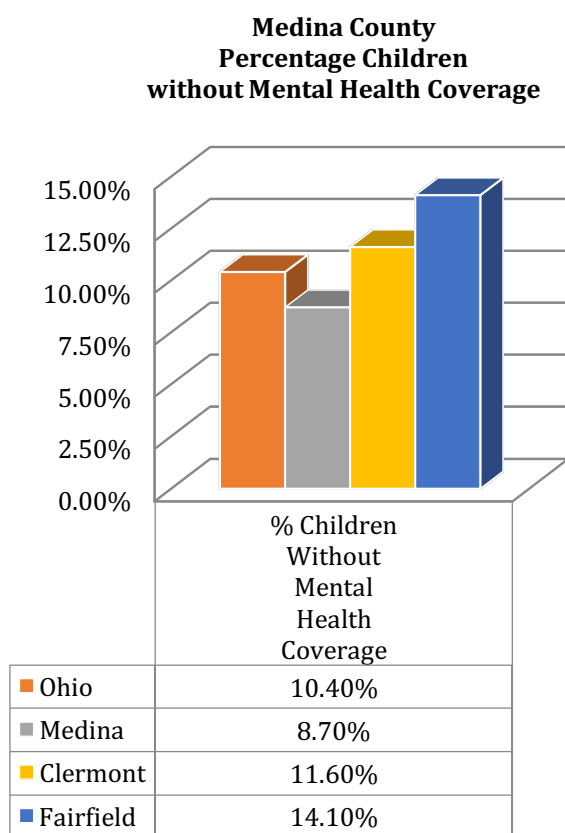
Percentage of Children without Mental Health Coverage

What is the data source for this indicator?

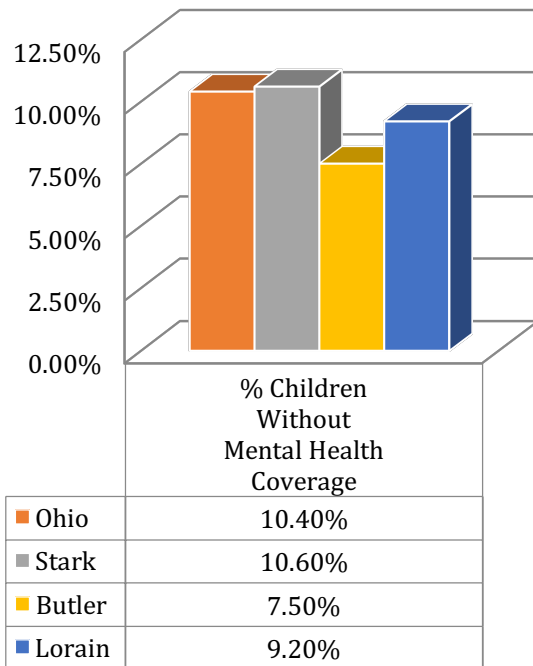
“Percentage of Children without Mental Health Coverage” represents an estimate of the uninsured rate for children under the age of 18 with regard to mental health, excluding 1-year olds. The most recent data (2008) is utilized here and is provided by Ohio’s Children Defense Fund, reported by the Kids Count Data Center, and is available at www.datacenter.kidscount.org.

How does our community rank?

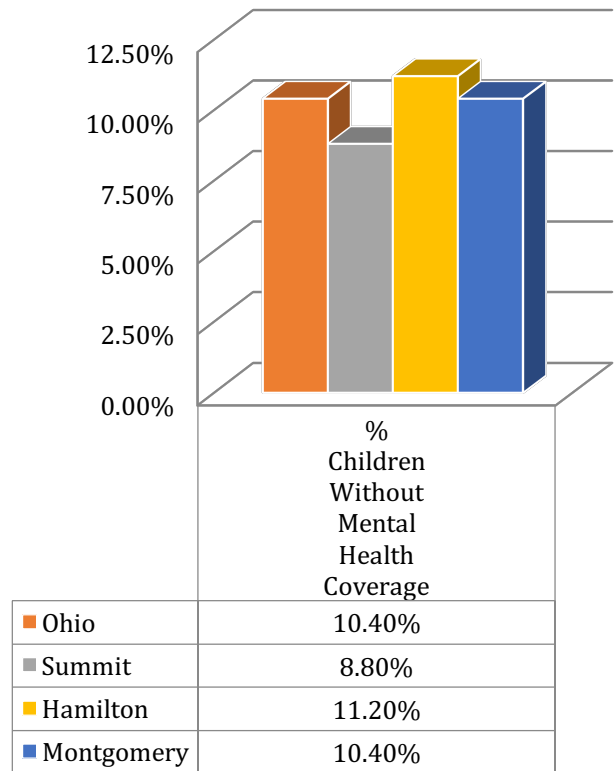
The “Percentage of Children without Mental Health Coverage” in Stark, Wayne, and Richland counties exceeded state and both comparison county percentages, respectively. Medina, Portage, and Summit counties did not meet the methodological criteria for identification as a significant health need. A Healthy People 2020 goal and national percentage were not available.



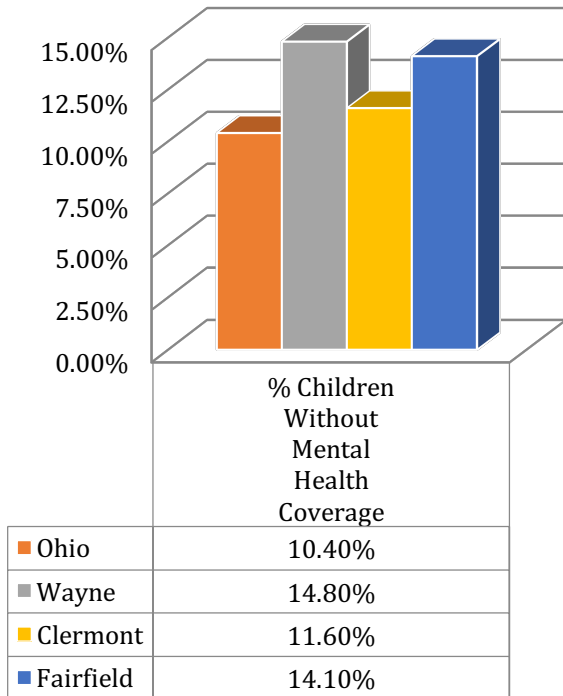
**Stark County
Percentage Children
without Mental Health Coverage**



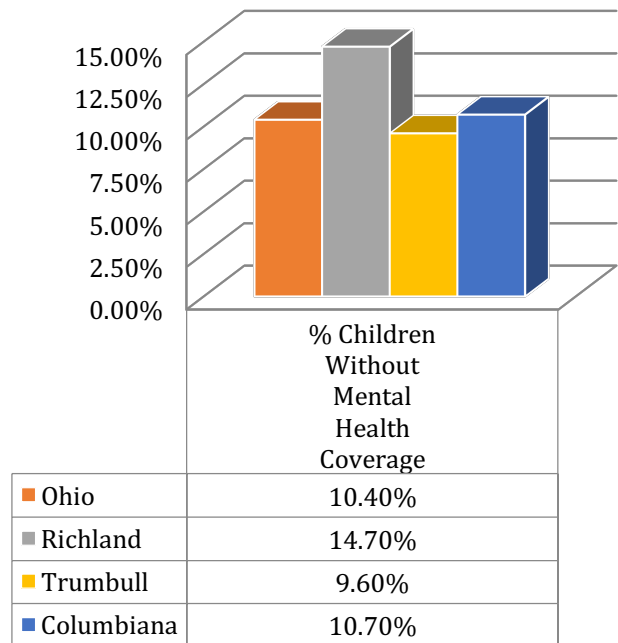
**Summit County
Percentage Children
without Mental Health Coverage**



**Wayne County
Percentage Children
without Mental Health Coverage**



**Richland County
Percentage Children
without Mental Health Coverage**



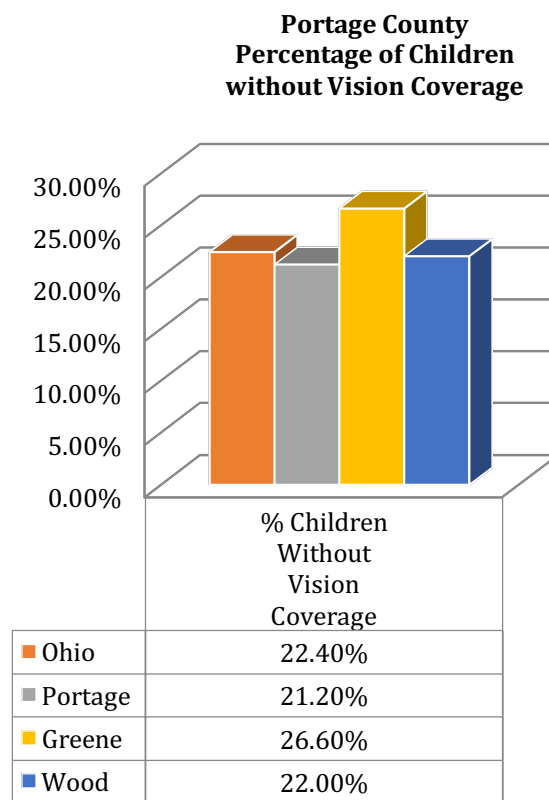
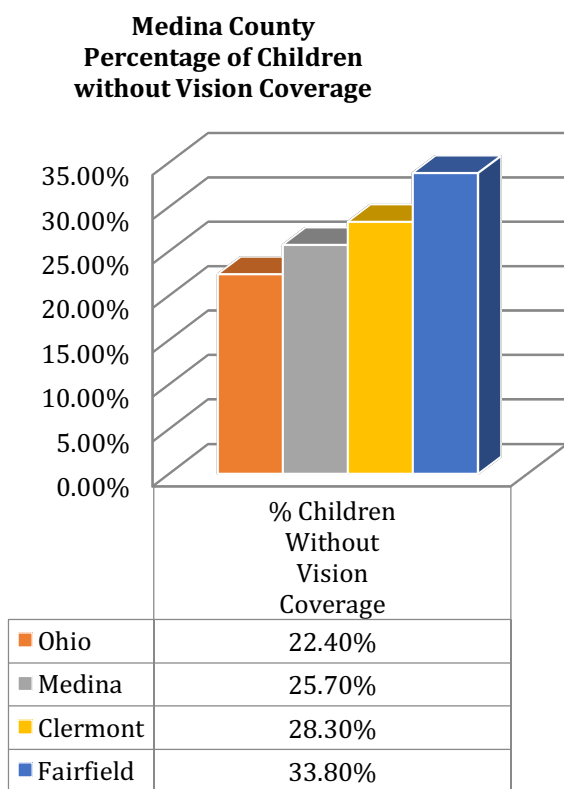
Percentage of Children without Vision Coverage

What is the data source for this indicator?

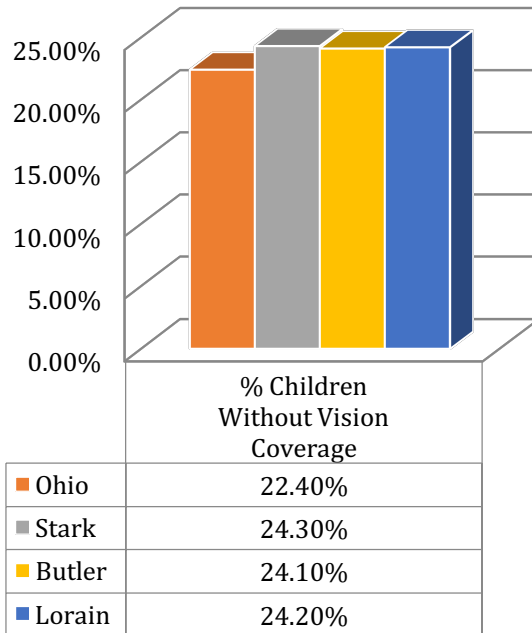
“Percentage of Children without Vision Coverage” represents an estimate of those children, under the age of 18, that do not currently have vision coverage; this estimate excludes 1-year olds. The most recent data (2008) is utilized here, which is provided by Ohio’s Children Defense Fund, and is reported by the Kids Count Data Center. The following data is available at www.datacenter.kidscount.org.

How does our community rank?

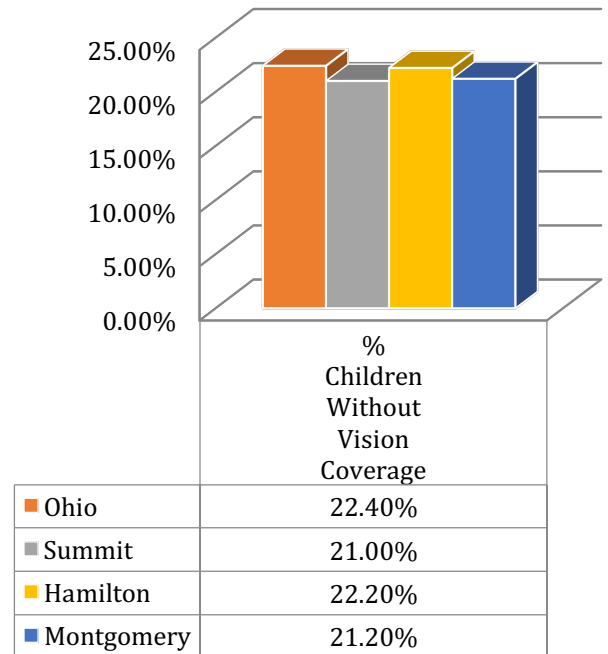
The “Percentage of Children without Vision Coverage” in Stark County exceeds the state and both comparison county percentages, respectively. The “Percentage of Children without Vision Coverage” in Medina, Portage, Summit, Wayne, and Richland counties did not meet the methodological criteria for identification as a significant health need. A Healthy People 2020 goal and national percentage were not available.



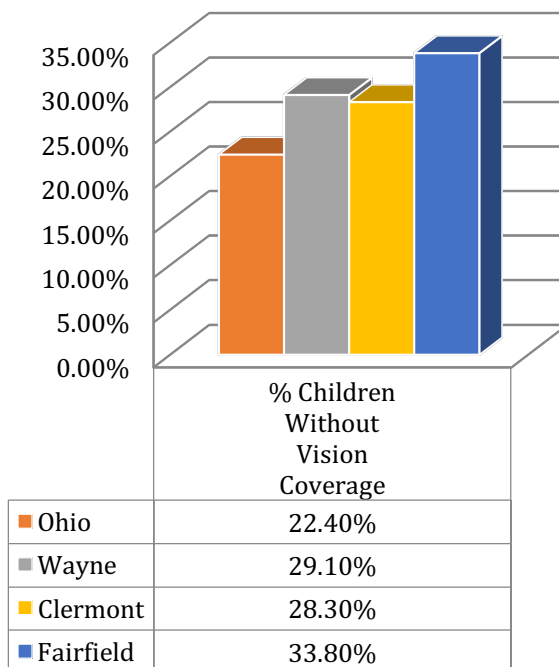
**Stark County
Percentage of Children
without Vision Coverage**



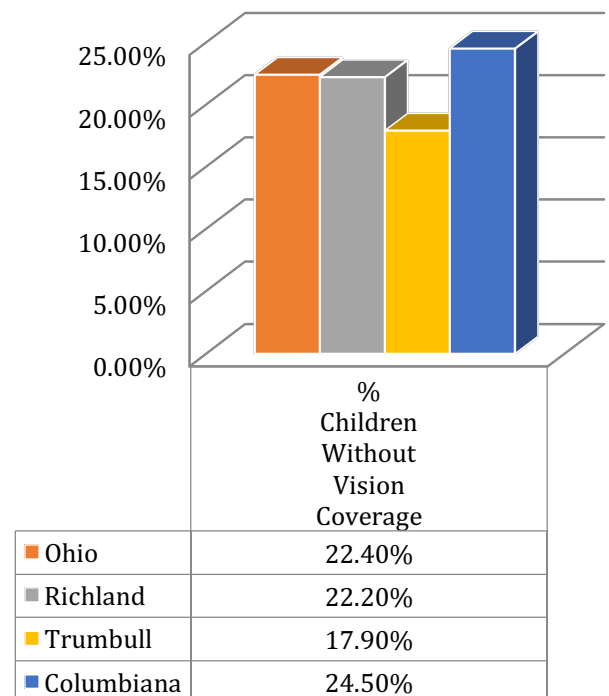
**Summit County
Percentage of Children
without Vision Coverage**



**Wayne County
Percentage of Children
without Vision Coverage**



**Richland County
Percentage of Children
without Vision Coverage**



Child Lifestyle Factors

Child lifestyle factors pertain to a number of influences that can have an impact on a child's development and health status, such as (but not limited to): regular physical activity, social interaction, adequate nutrition and proper diet, weight, and the environment. Two important factors here, food insecurity and obesity, are closely related, as low-income households typically have a greater presence of inexpensive, low-nutrient, calorically-dense food options that contribute to overweightness and obesity (Nackers and Appelhans 2013). Being overweight is a condition where an individual's body weight, in proportion to their height, is higher than what is medically recommended. This measurement of medically significant weight is based on Body Mass Index (BMI), a calculation that divides an individual's weight (in kilograms) by height (square meters), deems those with a BMI between 25 and 29.9 are overweight, while those with a BMI of 30 or more as obese (CDC 2015). Health risks associated with overweightness and obesity in children include: high blood pressure, high cholesterol, diminished glucose tolerance, insulin resistance, type-II diabetes, respiratory and joint problems, fatty liver disease, gallstones, heartburn, depression, behavioral problems, low quality of life, and problems with social, emotional, and physical functioning (CDC 2015).

The child lifestyle factors identified as significant health needs in the Akron Children's Hospital service area are:

- Food insecurity
- Obesity

Percentage of Children in Food Insecure Households

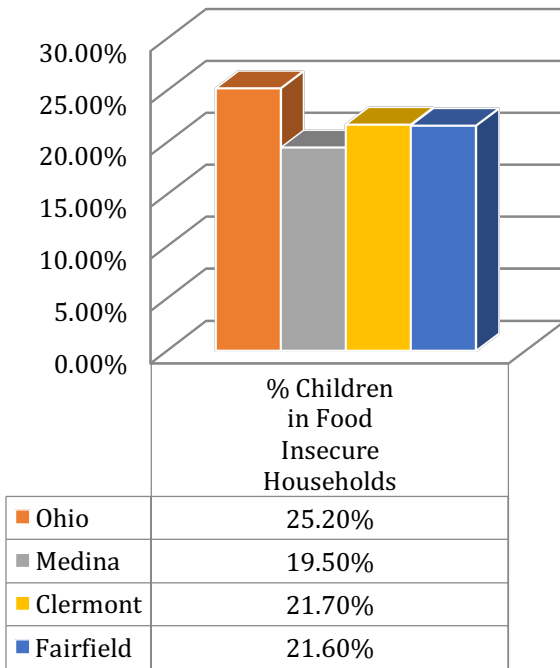
What is the data source for this indicator?

"Percentage of Children in Food Insecure Households" consists of children, under the age of 18, living in households that were uncertain of the ability or were unable to acquire enough food for all members of the household, due to insufficient money or resources. The most recent data (2012) is utilized here, which is provided by the National Kids Count, reported by the Kids Count Data Center, and is available at www.datacenter.kidscount.org.

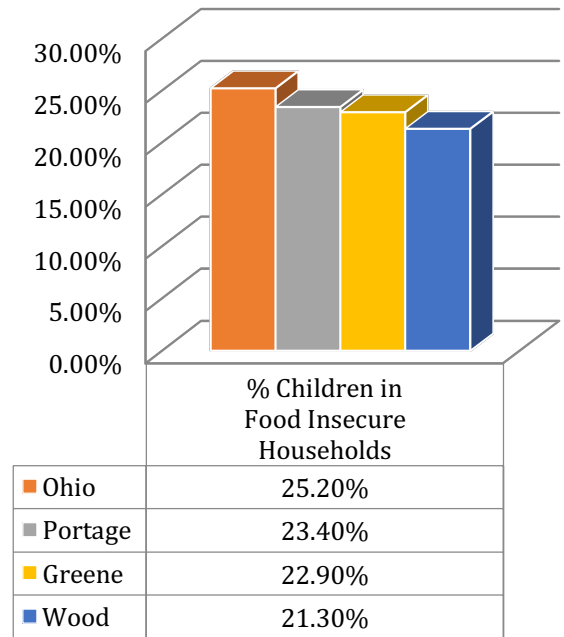
How does our community rank?

The "Percentage of Children in Food Insecure Households" in Portage, Stark, and Wayne counties is greater than two comparison counties. The "Percentage of Children in Food Insecure Households" in Richland County is higher than the state percentage. The "Percentage of Children in Food Insecure Households" in Summit County was higher than one comparison. A Healthy People 2020 and national percentage were not available. Food insecurity among children in households was also identified as a serious health need by both community leaders and focus group participants in all three counties in the hospital service area.

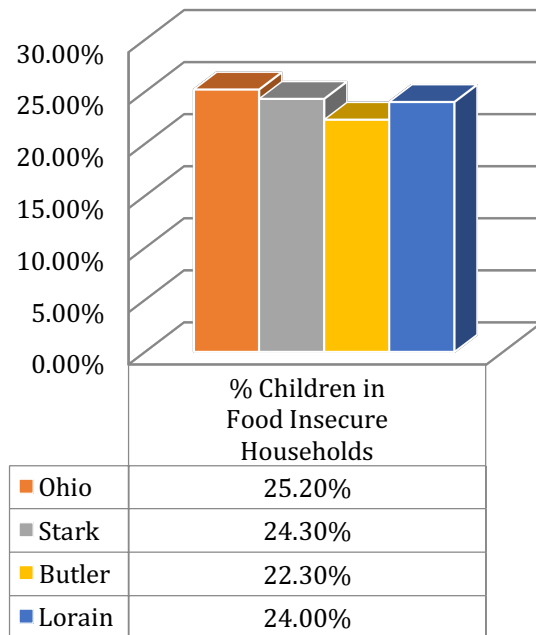
**Medina County
Percentage of Children
in Food Insecure Households**



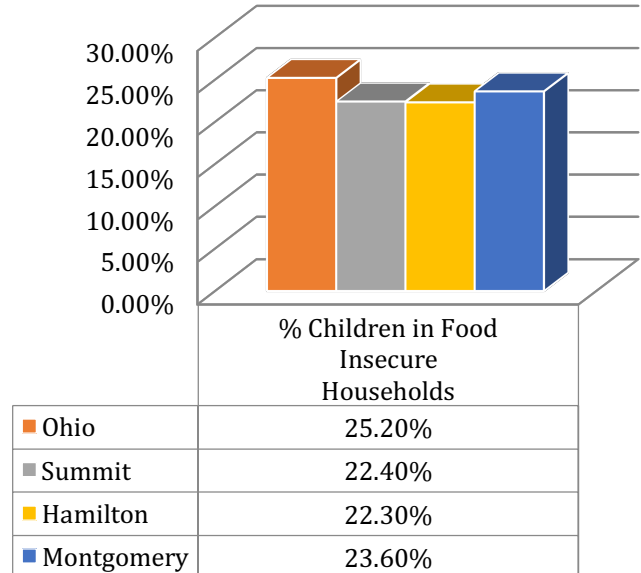
**Portage County
Percentage of Children
in Food Insecure Households**



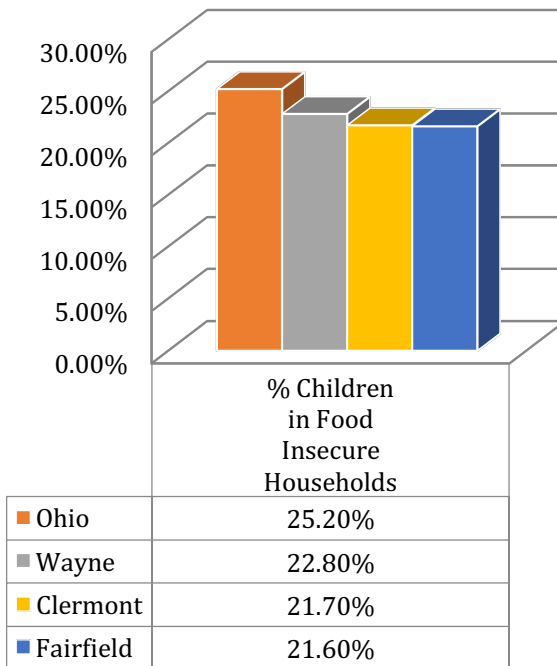
**Stark County
Percentage of Children
in Food Insecure Households**



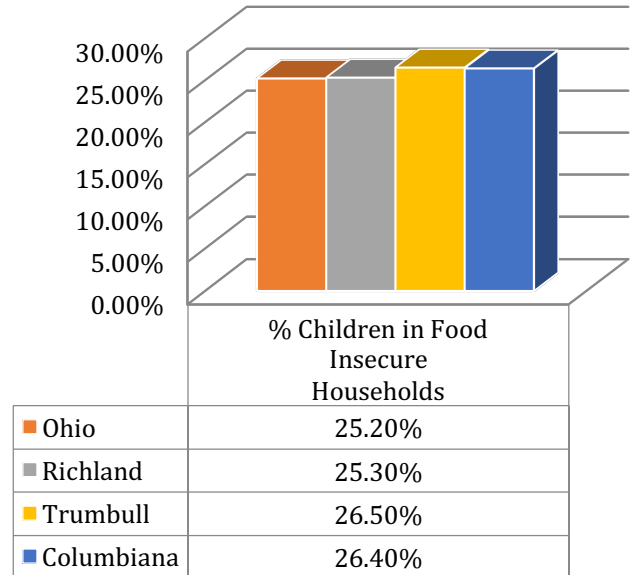
**Summit County
Percentage of Children
in Food Insecure Households**



**Wayne County
Percentage of Children
in Food Insecure Households**



**Richland County
Percentage of Children
in Food Insecure Households**



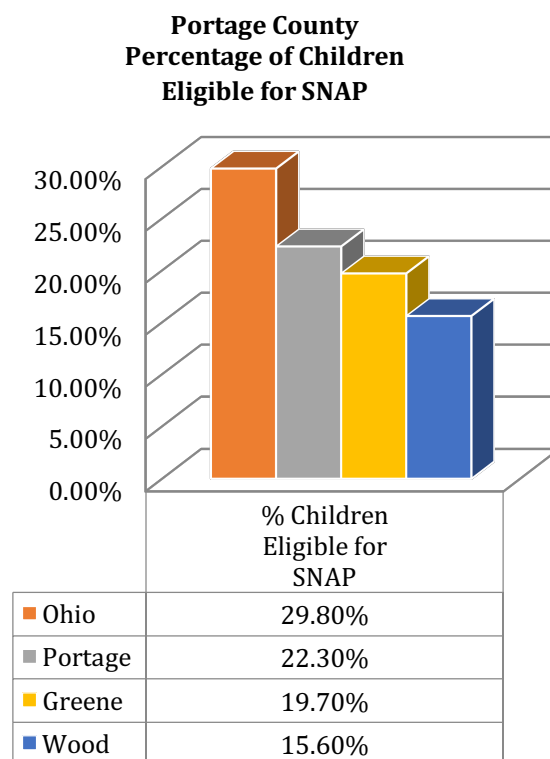
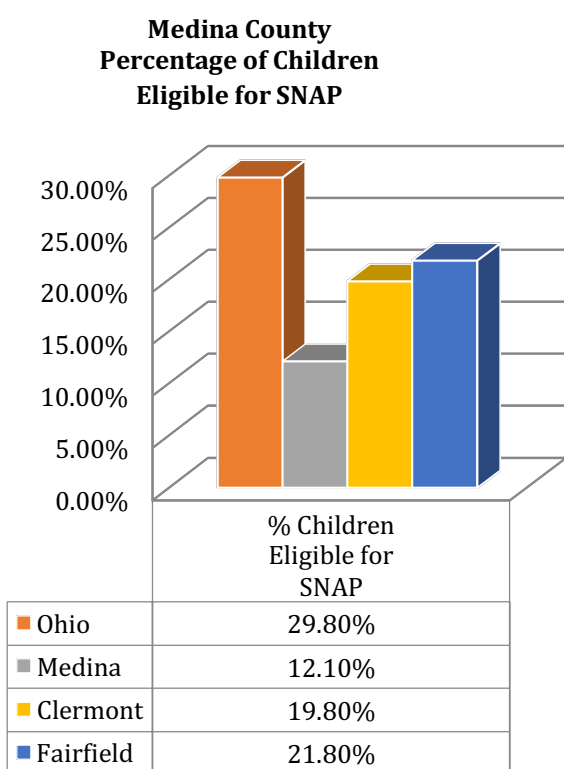
Percentage of Children Eligible for SNAP

What is the data source for this indicator?

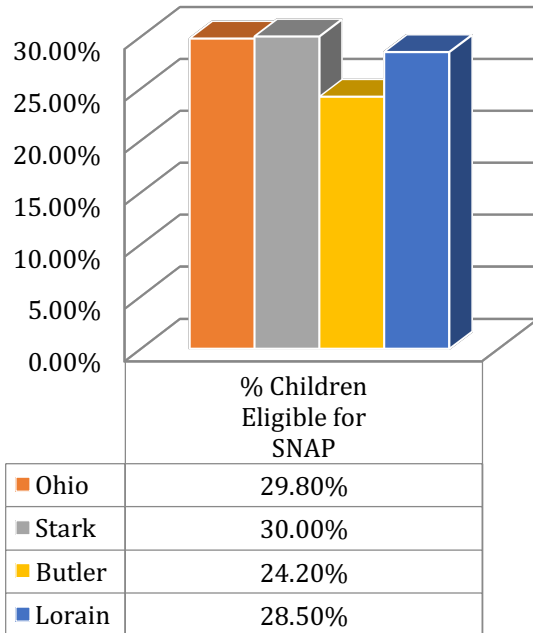
“Percentage of Children Eligible for SNAP” refers to the percentage of children eligible to receive Supplemental Nutrition Assistance Program benefits. The most recent data (2013) is utilized here, which is provided by the Ohio’s Children Defense Fund, reported by Kids Count Data Center, and available at www.datacenter.kidscount.org.

How does our community rank?

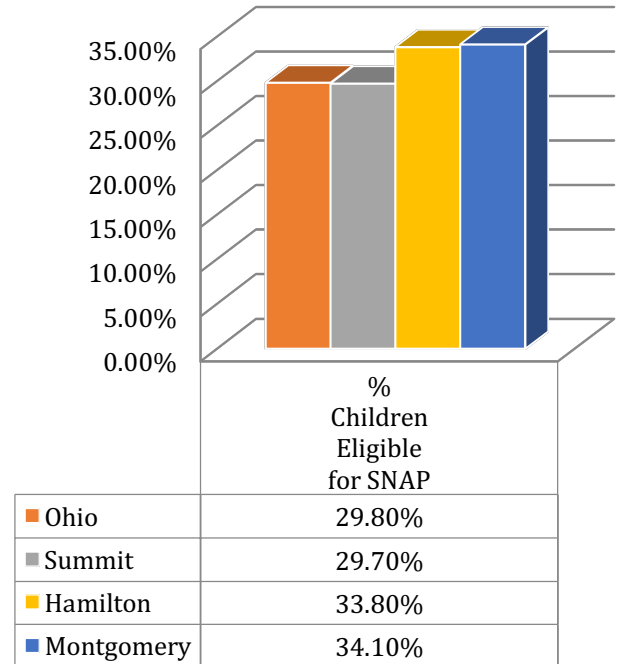
“Percentage of Children Eligible for SNAP” in Stark and Richland counties were greater than the state and comparison county percentages, respectively. Medina, Portage, Summit, and Wayne counties did not meet the methodological criteria for identification as a significant health need. A Healthy People 2020 goal and national percentage were not available.



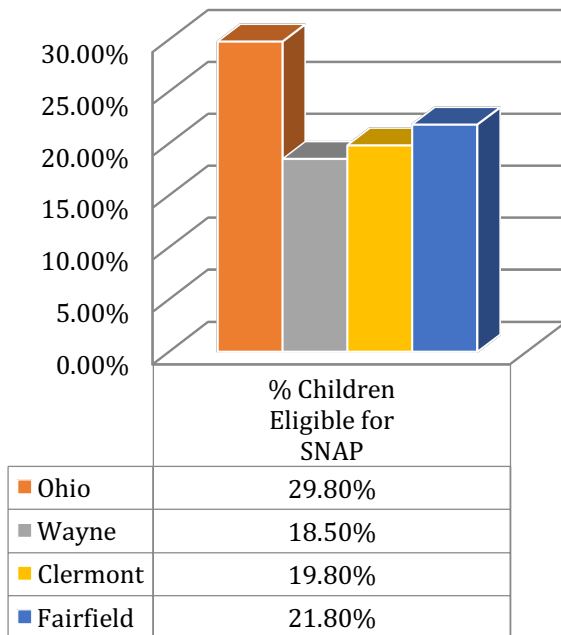
**Stark County
Percentage of Children
Eligible for SNAP**



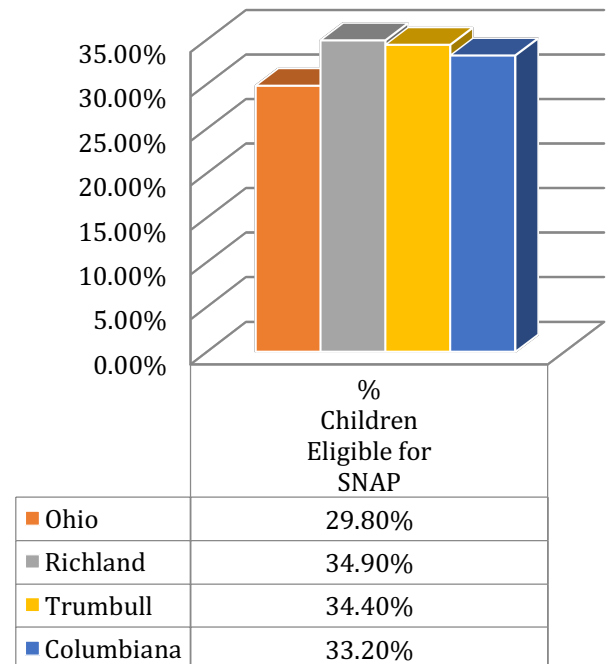
**Summit County
Percentage of Children
Eligible for SNAP**



**Wayne County
Percentage of Children
Eligible for SNAP**



**Richland County
Percentage of Children
Eligible for SNAP**



Percentage of 2 to 5 Year Olds Overweight

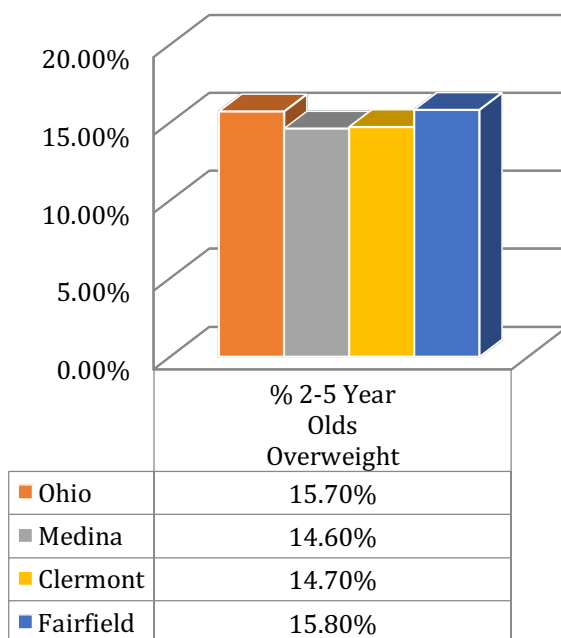
What is the data source for this indicator?

“Percentage of 2 to 5 Year Olds Overweight” represents the percentage of children, ages 2 to 5, that fall between the 85th and 95th percentile with respect to weight. The most recent data (2015) is utilized here, which is provided by the Ohio Department of Health’s Oral Health and BMI Survey, available at www.odh.ohio.gov. Obese and overweight children were identified by community leaders in interviews in every county within the Akron Children’s Hospital service area. Focus group participants in Summit and Medina counties also identified child obesity and overweight youth as significant health issues.

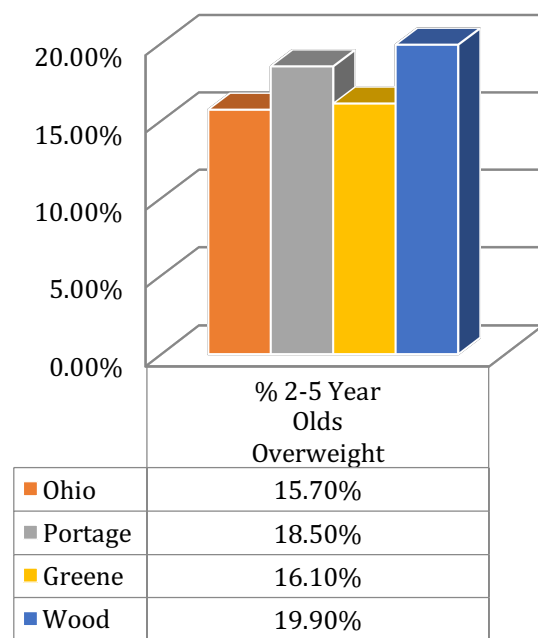
How does our community rank?

The “Percentage of 2 to 5 Year Olds Overweight” in Summit and Wayne counties were greater than the state and both comparison county percentages, respectively. The “Percentage of 2 to 5 Year Olds Overweight” in Medina, Portage, Stark, and Richland counties did not meet the methodological criteria for identification as a significant health need. A Healthy People 2020 goal and national percentage were not available.

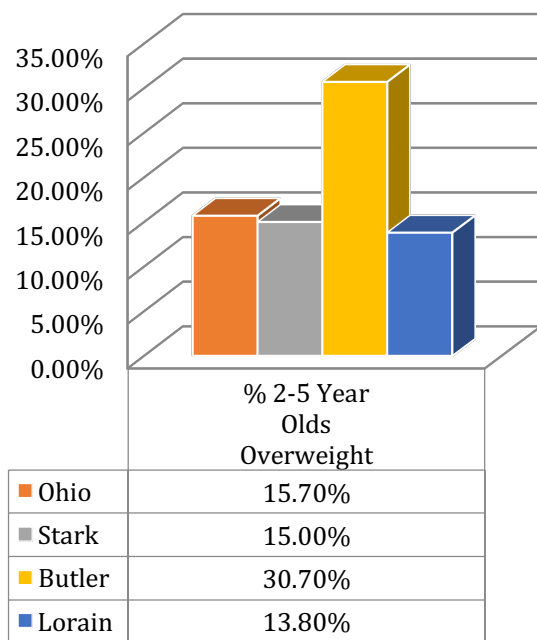
**Medina County
Percentage of 2 to 5 Year Olds Overweight**



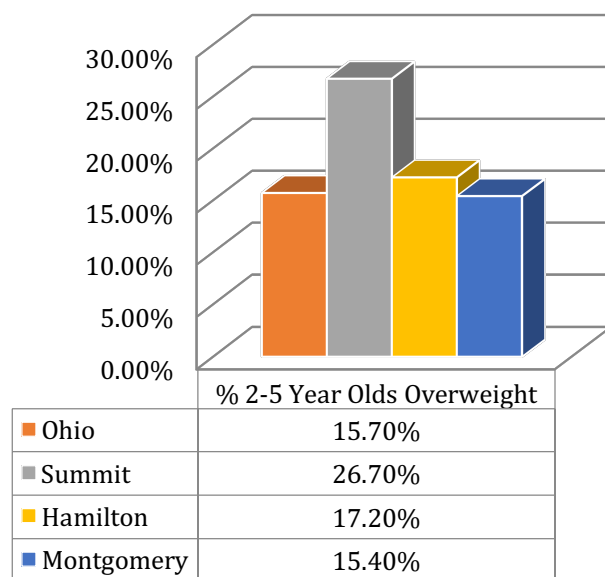
**Portage County
Percentage of 2 to 5 Year Olds Overweight**



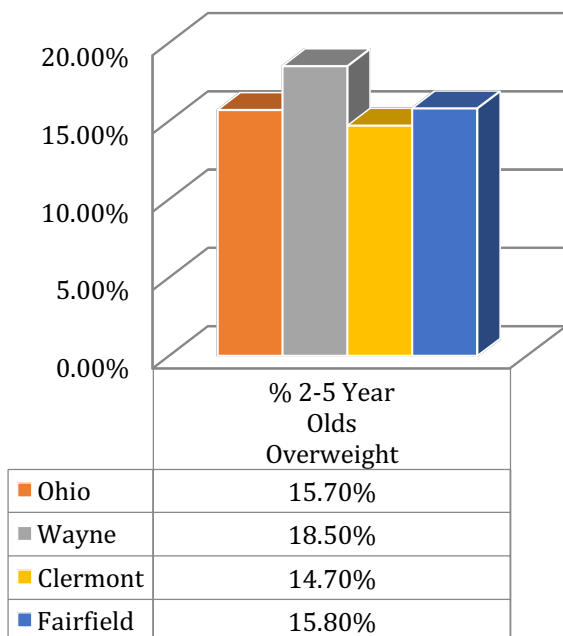
Stark County
Percentage of 2 to 5 Year Olds Overweight



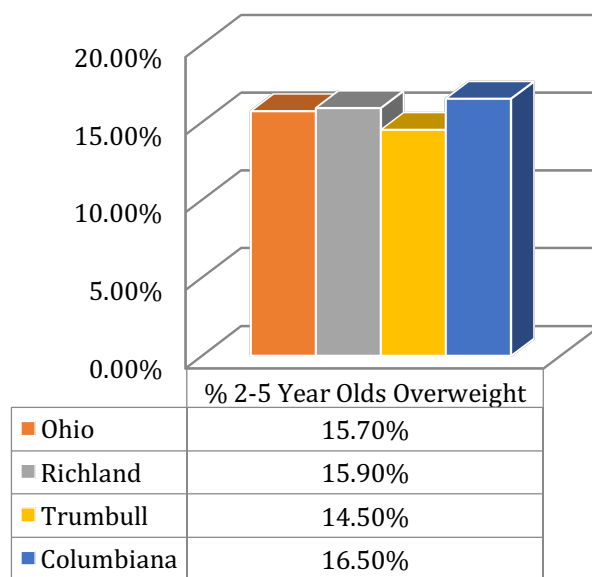
Summit County
Percentage of 2 to 5 Year Olds Overweight



Wayne County
Percentage of 2 to 5 Year Olds Overweight



Richland County
Percentage of 2 to 5 Year Olds Overweight



Percentage of 2 to 5 Year Olds Obese

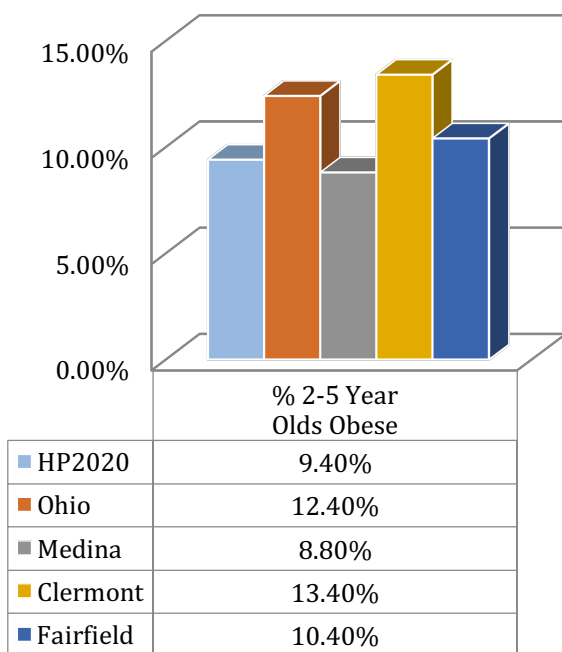
What is the data source for this indicator?

“Percentage of 2 to 5 Year Olds Obese” refers to children between the ages 2 and 5 years old who fall above the 95th percentile in weight. The most recent data (2015) is utilized here, which is provided by the Ohio Department of Health’s Oral Health and BMI Survey, available at www.odh.ohio.gov. Obese and overweight children were identified by community leaders in interviews in every county within the Akron Children’s Hospital service area. Focus group participants in Summit and Medina counties also identified child obesity and overweight youth as significant health issues.

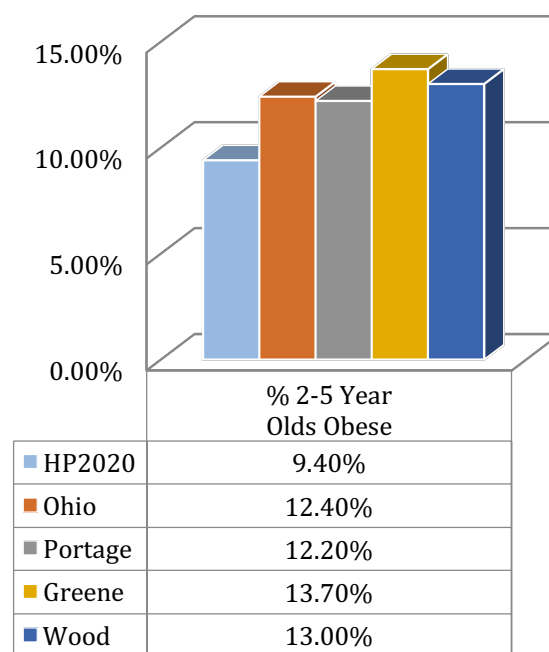
How does our community rank?

The “Percentage of 2 to 5 Year Olds Obese” in Wayne County was greater than the Healthy People 2020 percentage, the state percentage, and both comparison county percentages. The “Percentage of 2 to 5 Year Olds Obese” in Medina, Portage, Stark, and Richland counties did not meet the methodological criteria for identification as a significant health need. Data for Summit County was not available. A national percentage was not available.

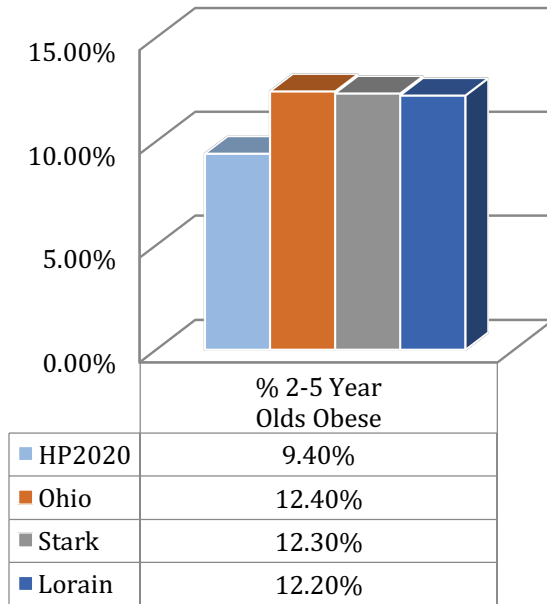
**Medina County
Percentage of 2 to 5 Year Olds Obese**



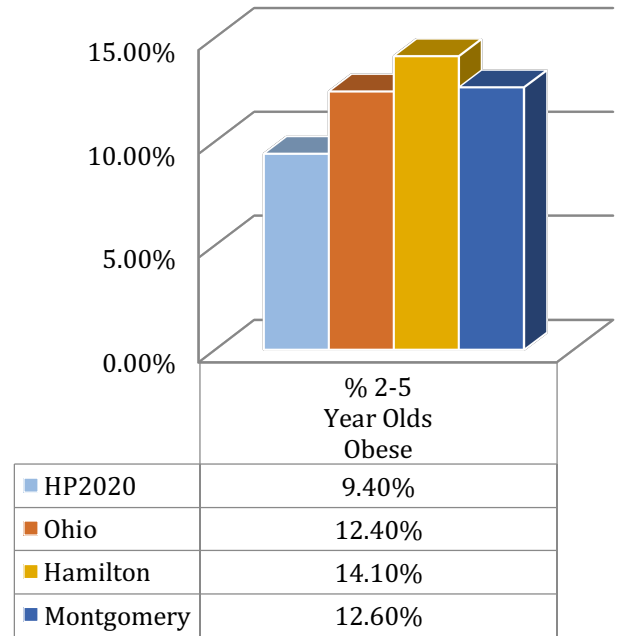
**Portage County
Percentage of 2 to 5 Year Olds Obese**



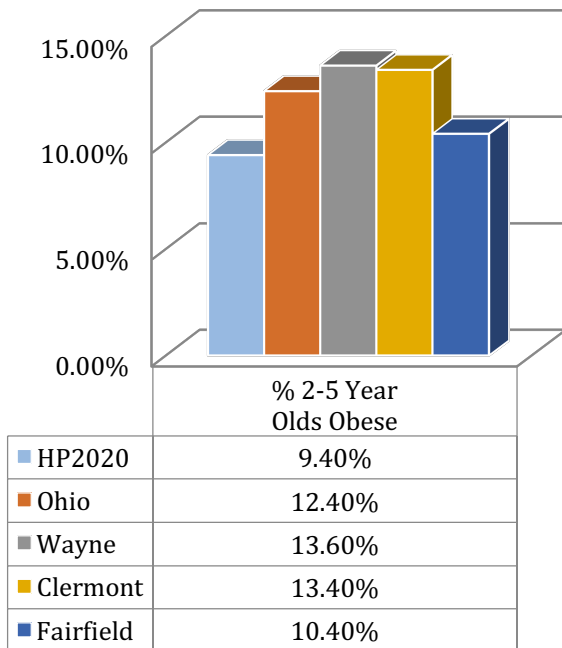
Stark County
Percentage of 2 to 5 Year Olds Obese



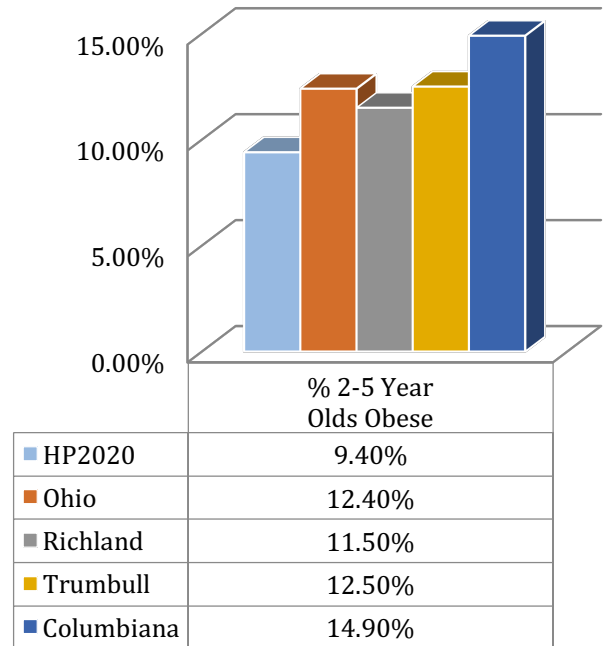
Summit County
Percentage of 2 to 5 Year Olds Obese



Wayne County
Percentage of 2 to 5 Year Olds Obese



Richland County
Percentage of 2 to 5 Year Olds Obese



Chronic Disease

Chronic diseases are a type of disease that a person can live with for a prolonged period of time, and sometimes indefinitely. Those with a chronic disease usually need to see their doctors on a regular basis in order to monitor the disease progression and receive treatment.

The chronic diseases identified as significant health needs in the Akron Children's Hospital service area are:

- Asthma
- Diabetes

Asthma Rate Among Children 0 to 18 Years

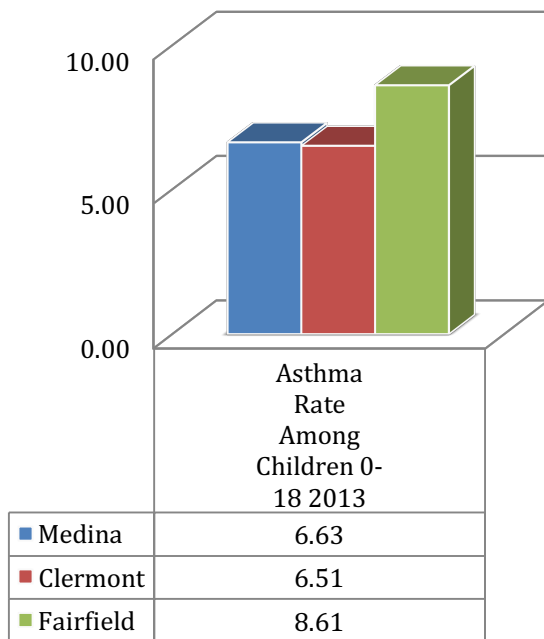
What is the data source for this indicator?

"Asthma Rate Among Children 0 to 18 Years" refers to the rate of asthma among children, ages 0 to 18 years, per 1,000 children. The most recent data (2013) is utilized here, which is provided by the Ohio Hospital Association, and is not consistent with the rest of the epidemiological data presented in this appendix, as it lacks Healthy People 2020, national, and state data, and did not meet the methodological criteria for identification as a significant health need. Inferences drawn from the following data should not be generalized beyond the scope of the included counties. Asthma, however, was identified as a significant health issue by focus group participants in Summit and Wayne counties as well as by the Akron Children's Hospital internal team of medical leaders and hospital administrators.

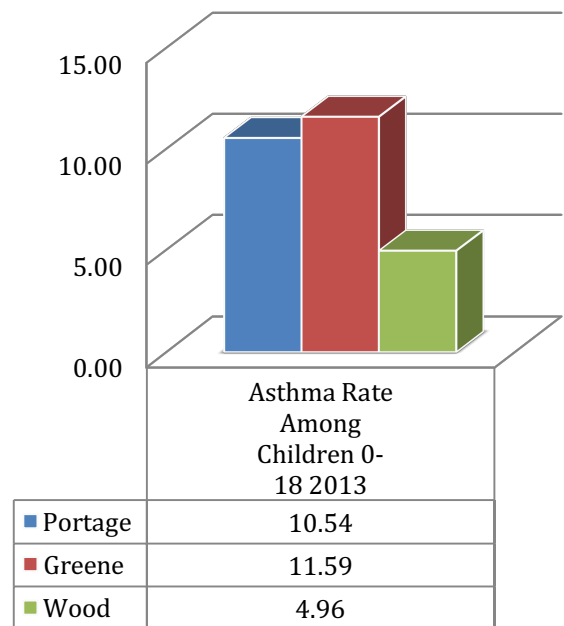
How does our community rank?

The "Asthma Rate Among Children 0 to 18 Years" was highest in Summit County, followed by Portage, Richland, Stark, Medina, and Wayne counties, respectively.

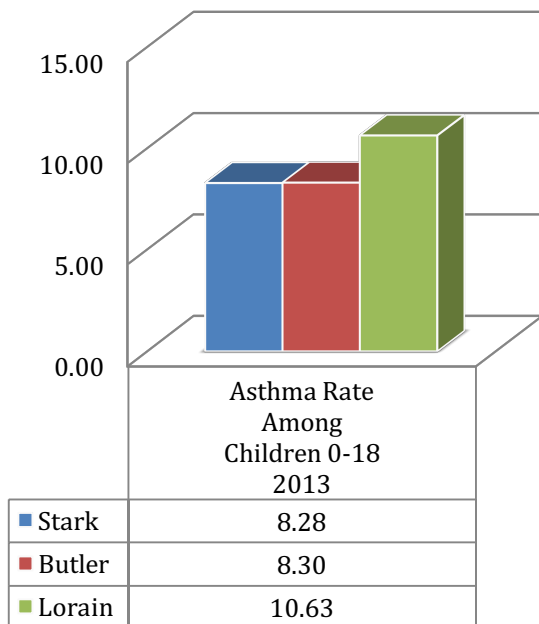
Medina County
Asthma Rate Among Children 0 to 18
(per 1,000)



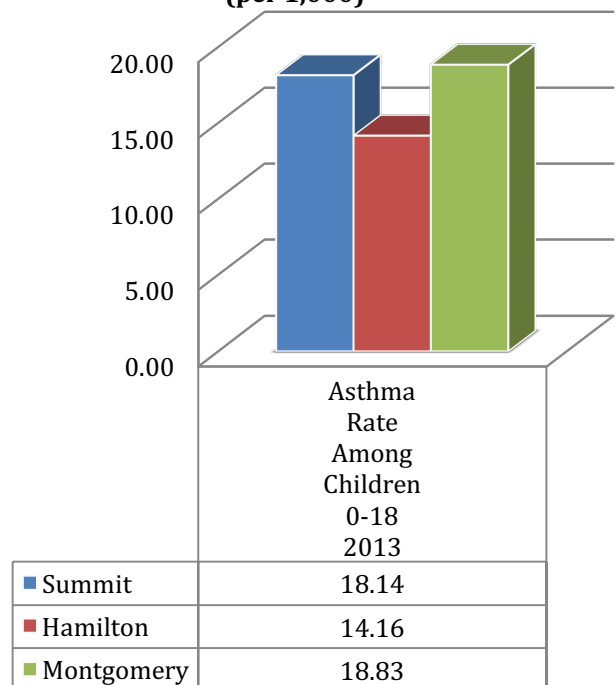
Portage County
Asthma Rate Among Children 0 to 18
(per 1,000)



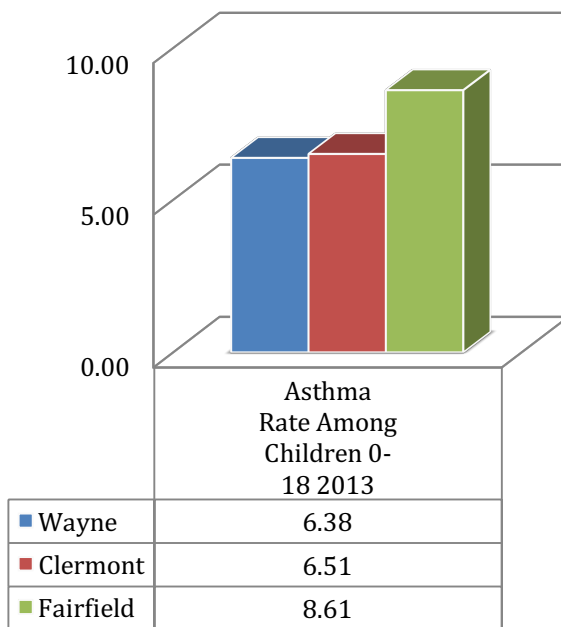
Stark County
Asthma Rate Among Children 0 to 18
(per 1,000)



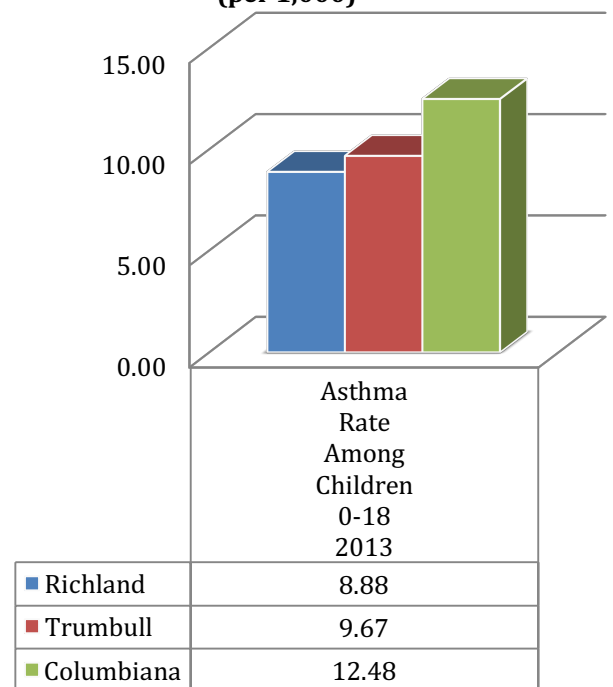
Summit County
Asthma Rate Among Children 0 to 18
(per 1,000)



Wayne County
Asthma Rate Among Children 0 to 18
(per 1,000)



Richland County
Asthma Rate Among Children 0 to 18
(per 1,000)



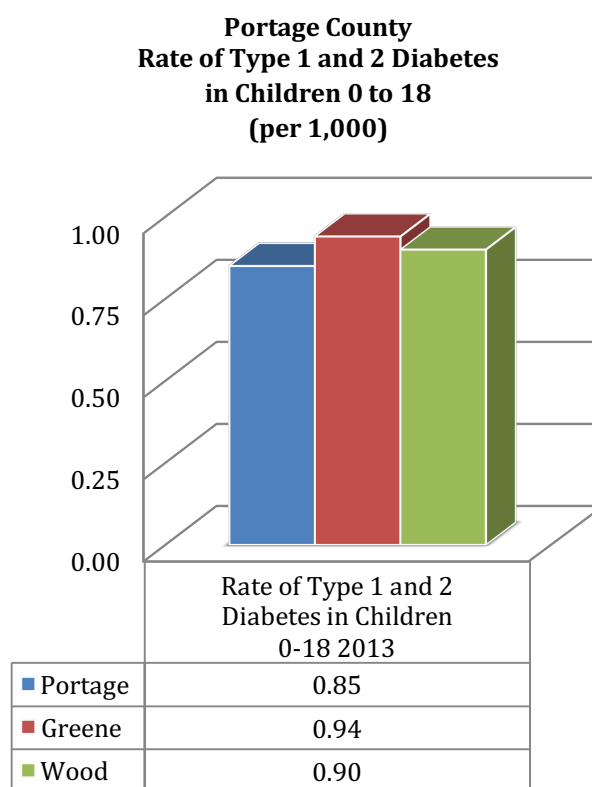
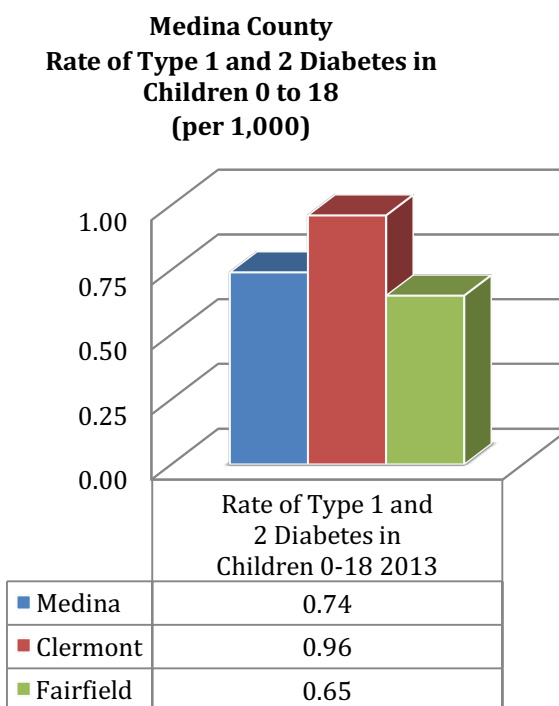
Rate of Type 1 and 2 Diabetes in Children 0 to 18 Years

What is the data source for this indicator?

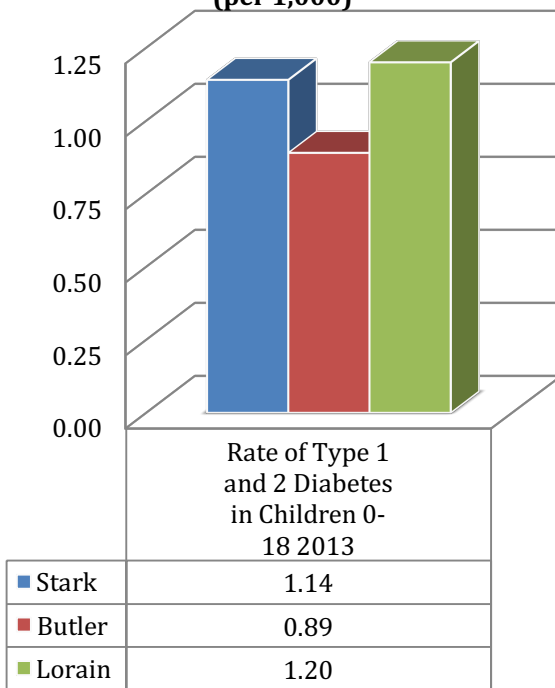
“Rate of Type 1 and 2 Diabetes in Children 0 to 18 Years” refers to rate of type 1 and 2 diabetes in children, ages 0 to 18 years, per 1,000 children. The most recent data (2013) is utilized here, which is provided by the Ohio Hospital Association, and is not consistent with the rest of the epidemiological data presented in this appendix, as it lacks Healthy People 2020, national, and state data, and did not meet the methodological criteria for identification as a significant health need. Inferences drawn from the following data should not be generalized beyond the scope of the included counties.

How does our community rank?

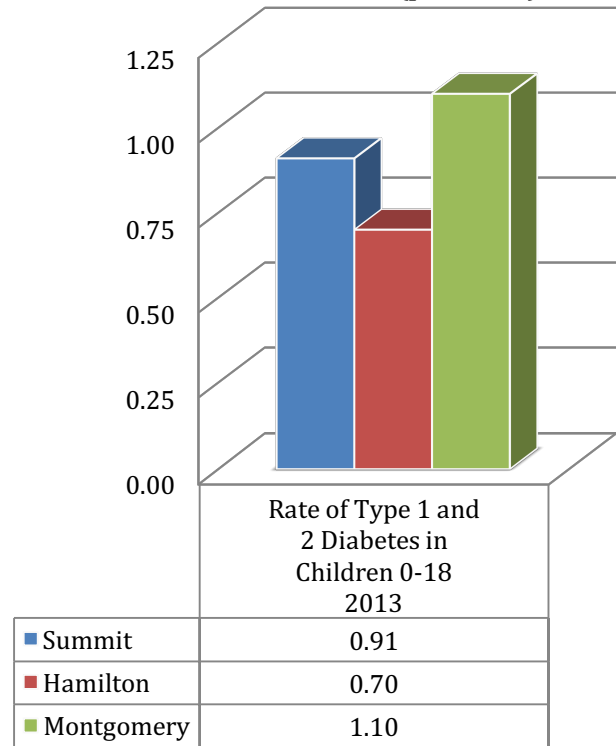
The “Rate of Type 1 and 2 Diabetes in Children 0 to 18 Years” was highest in Wayne County, followed by Stark, Richland, Summit, Portage, and Medina counties, respectively.



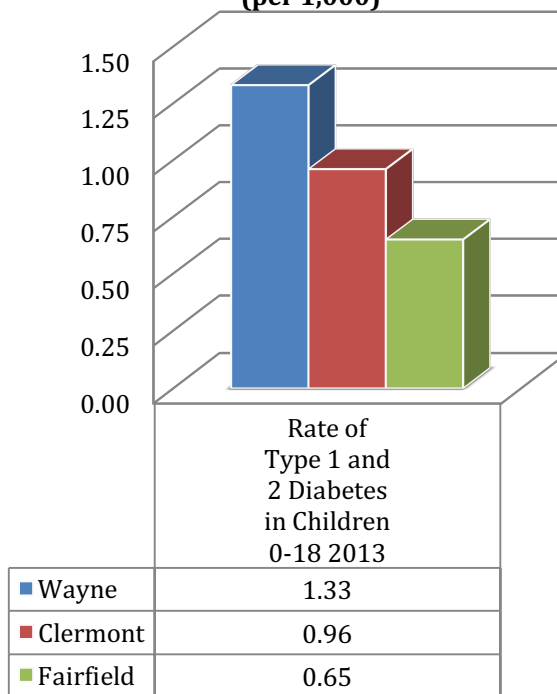
Stark County
Rate of Type 1 and 2 Diabetes
in Children 0 to 18
(per 1,000)



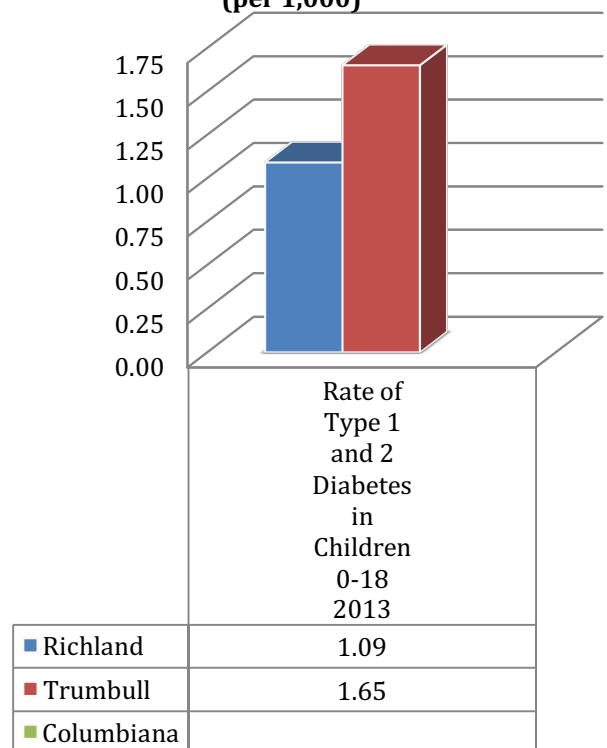
Summit County
Rate of Type 1 and 2 Diabetes
in Children 0 to 18 (per 1,000)



Wayne County
Rate of Type 1 and 2 Diabetes
in Children 0 to 18
(per 1,000)



Richland County
Rate of Type 1 and 2 Diabetes
in Children 0 to 18
(per 1,000)



Crime and Violence

The rate of childhood abuse and neglect in the United States is a staggering 1 in 4 (HHS 2016), the rate of which is often thought under-reported due to the nature of the abuse. Moreover, the physical and psychological repercussions of this abuse is wide-reaching and associated with improper brain development, poor cognitive, social skills, and language development, cerebral palsy, anxiety, blindness, cardiovascular disease, obesity, cancer, high blood pressure, high cholesterol, and substance use (CDC 2016).

The crime and violence issues identified as significant health needs in the Akron Children's Hospital service area are:

- Child Abuse and Neglect
- Child Trafficking

Child Abuse and Neglect Rate

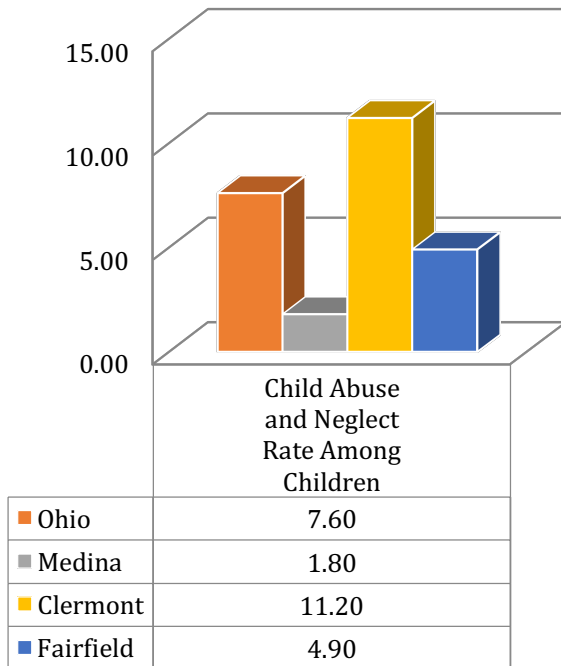
What is the data source for this indicator?

“Child Abuse and Neglect Rate” is the rate of substantiated reports of child abuse and neglect, including emotional mistreatment, neglect, physical abuse, and sexual abuse, per 1,000 children in the county population. The most recent data (2013) is utilized, which is provided by the Ohio Department of Job and Family Services, is available at www.datacenter.kidscount.org. Further, community leaders interviewed in the Akron Children’s Hospital service area identified domestic violence as a source of child abuse and adult opioid and heroin use as a source of child neglect in all six of the hospital’s service area counties.

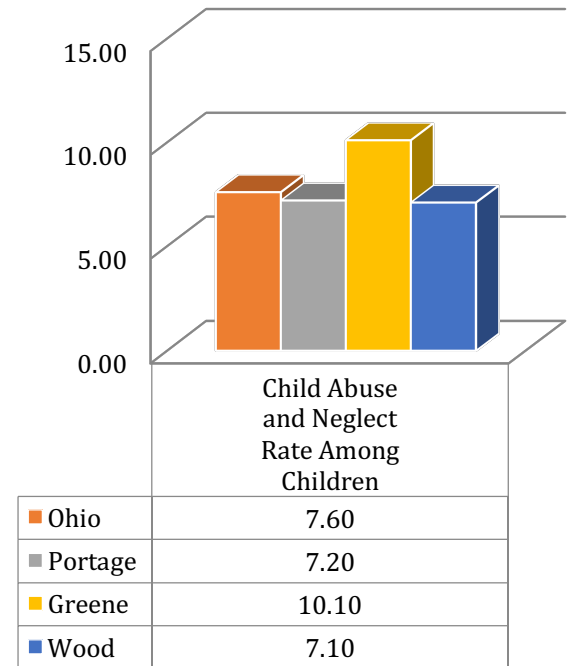
How does our community rank?

The “Child Abuse and Neglect Rate” in Wayne and Richland counties exceeded the state rate, as well as both comparison county rates. The “Child Abuse and Neglect Rate” in Medina, Portage, Stark, and Summit counties did not meet the methodological criteria for identification as a significant health need. A Healthy People 2020 goal and national rate were not available.

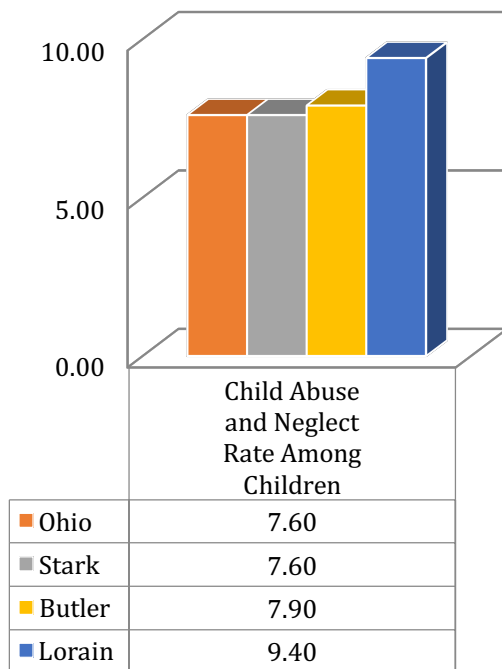
Medina County
Child Abuse and Neglect Rate
(per 1,000)



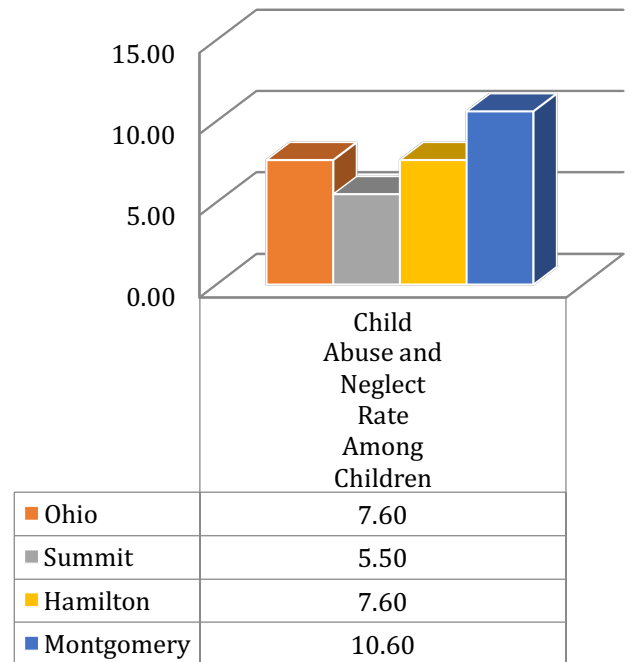
Portage County
Child Abuse and Neglect Rate
(per 1,000)



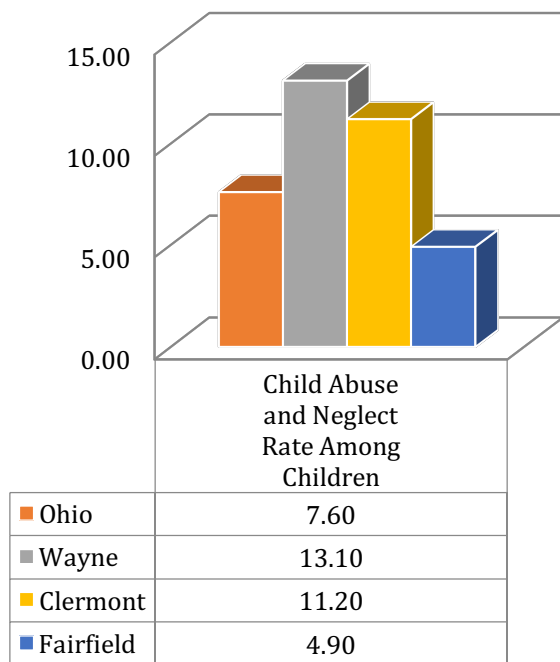
Stark County
Child Abuse and Neglect Rate
(per 1,000)



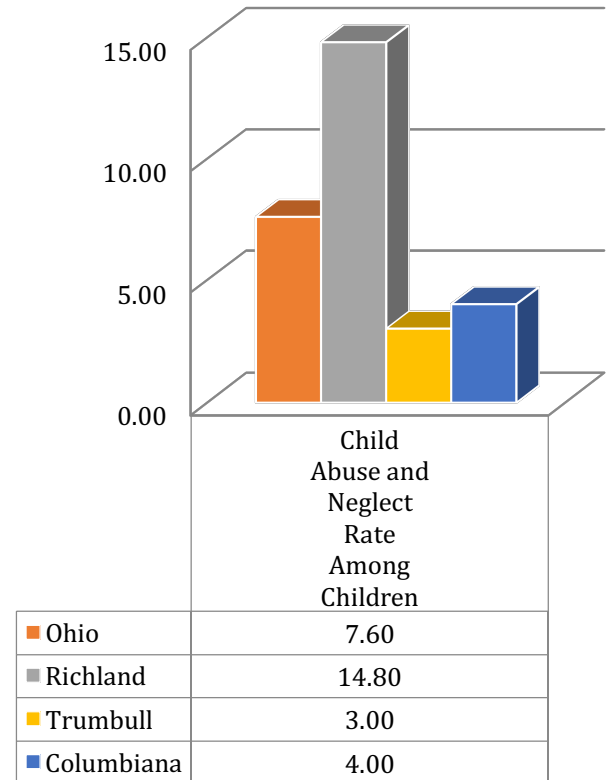
Summit County
Child Abuse and Neglect Rate
(per 1,000)



**Wayne County
Child Abuse and Neglect Rate
(per 1,000)**



**Richland County
Child Abuse and Neglect Rate
(per 1,000)**



Child Trafficking

Human trafficking is a form of modern day slavery where people profit from the control and exploitation of others. The Governor's Task Ohio Human Trafficking Task Force Report of July 2015 reported that more than 1,000 Ohio children are estimated to be trafficked every year in the sex trade, while an additional 3,000 more Ohio children are at risk of becoming victims. In 2014, the Ohio Attorney General's Office reported 22,650 missing persons, with 18,097 of them being missing and runaway youth. Between July 2013 and April 2015, the Ohio Network of Children's Advocacy Centers identified 135 cases of minor and young adult victims of trafficking. The majority of victims were females between the ages of 13-18, twenty victims were under the age of 13.3. While epidemiologic data were not available to compare rates in our counties to peer counties, the State and the nation, qualitative data documented that child trafficking is a problem in the hospital service area. Trafficking in children for sex was reported by community leaders in Wayne County. Additionally, it was identified by focus group participants in Portage and Wayne counties.

Environmental Factors

The environmental factors identified as significant health needs in the Akron Children's Hospital service area are:

- Elevated blood lead levels

Elevated Blood Levels

Epidemiological data did not identify lead poisoning as a significant health need in the six-county hospital service area. However, qualitative data identified lead poisoning as a significant health issue among community leaders interviewed in all six Akron Children's Hospital service counties. It was also discussed as a concern by focus group participants in both Stark and Portage counties.

Injury

Unintentional injuries comprise an increasingly large yearly percentage of mortality and morbidity events here in the United States. On average 12,175 children 0 – 19 years of age died each year in the United States from an unintentional injury (CDC 2016).

The injury issues identified as significant health needs in the Akron Children's Hospital service area are:

- Falls
- Motor vehicle crashes

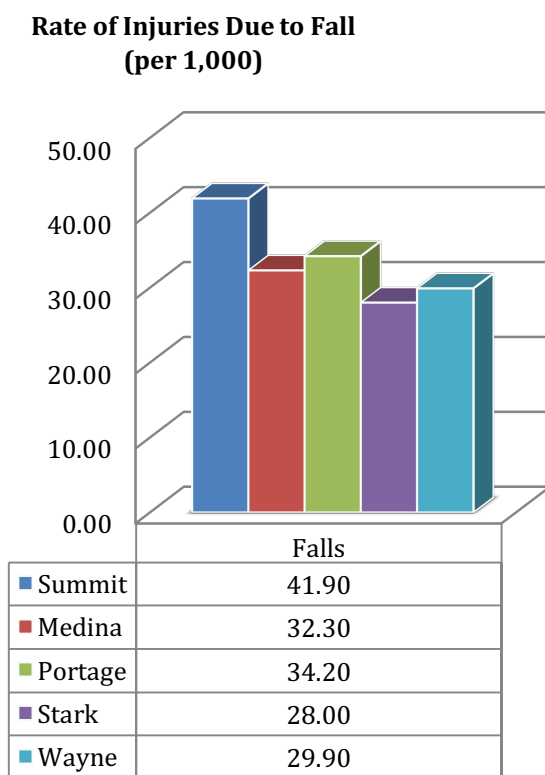
Fall-related Injury Rate

What is the data source for this indicator?

“Rate of Injuries Due to Fall” is the rate of injuries due to fall per 1,000 children living in the respective county. The following data was provided by Akron Children’s Hospital and the Ohio Hospital Association, and is not consistent with the rest of the epidemiological data presented in this appendix, as it lacks Healthy People 2020, national, and state data, and did not meet the methodological criteria for identification as a significant health need. Inferences drawn from the following data should not be generalized beyond the scope of the included counties. Fall-related injuries to children was specifically identified by community leaders within Portage County as one of their more significant health concerns. In addition, focus group participants identified fall related injuries to children as a significant health issue within Stark County. The Akron Children’s Hospital internal team of medical leaders and hospital administrators also agreed that fall related injuries was a significant health need in their service area.

How does our community rank?

The “Rate of Injuries Due to Fall” was highest in Summit County, followed by Portage, Medina, Wayne, and Stark counties, respectively.



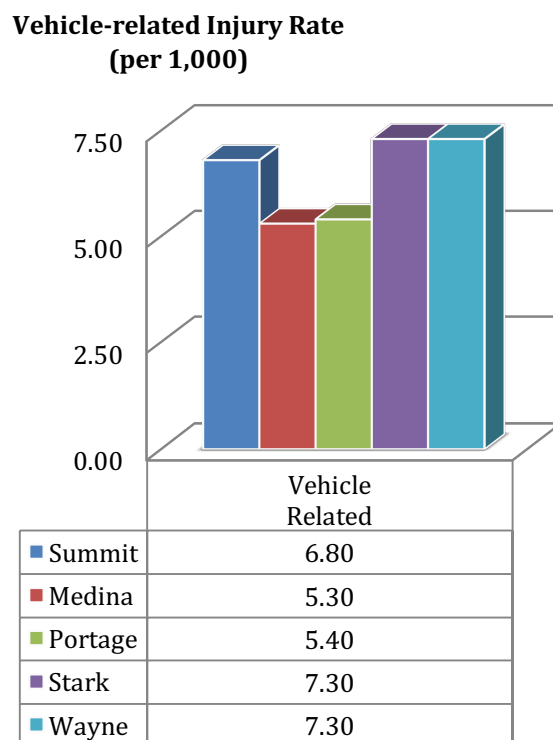
Vehicle-related Injury Rate

What is the data source for this indicator?

Combining all unintentional injury deaths among those between 0 and 19 years of age, motor vehicle traffic related deaths is the leading cause of death (CDC, 2016). “Vehicle-related Injury Rate” refers to injury brought forth by a vehicle-related injury, and is presented as a rate per 1,000 children in the respective county. The following data was provided by Akron Children’s Hospital and the Ohio Hospital Association, and is not consistent with the rest of the epidemiological data presented in this appendix, as it lacks Healthy People 2020, national, and state data, and did not meet the methodological criteria for identification as a significant health need. Inferences drawn from the following data should not be generalized beyond the scope of the included counties. Vehicle related injuries was identified as a significant health issue by the Akron Children’s Hospital internal team of medical leaders and hospital administrators in their service area.

How does our community rank?

The “Vehicle-related Injury Rate” was highest in both Stark and Wayne Counties, respectively, followed by Summit, Portage, and Medina Counties, respectively.



Maternal and Infant Health

Maternal and infant health refers to a number of factors that affect pregnancy, delivery, and subsequent infant health. Pregnancy and childbirth impact the physical, mental, emotional, and socioeconomic health of the mother, as well as the immediate family (CDC 2016). Though typically attributed to less developed countries, disparities in maternal health, mortality, and morbidity still persist here in the United States (Agrawal 2015). As such, improving the health and well-being of mothers and infants is an important public health goal.

The Maternal and Child Health issues identified as significant health needs in the Akron Children's Hospital service area are:

- Infant mortality
- Low birth rate
- Teen Pregnancy

Infant Death Rate 2014

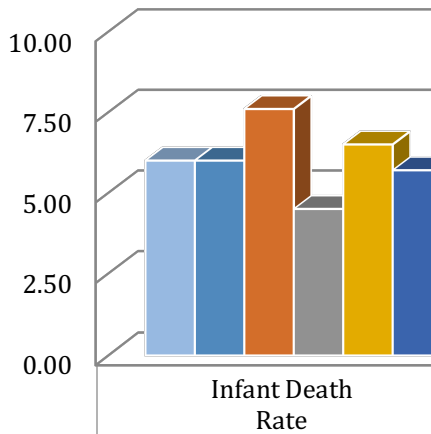
What is the data source for this indicator?

“Infant Death Rate” refers to the number of infants during 2014 that died prior to their first birthday, per 1,000 live births-The most recent data (2014) is utilized here, which is provided by the Ohio Department of Health, and is available at www.odh.ohio.gov.

How does our community rank?

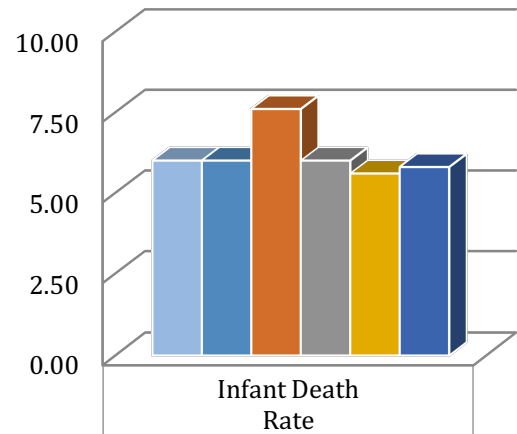
The “Infant Death Rate” in Stark County is greater than the Healthy People 2020 goal, as well as the national, state, and both comparison county rates, respectively. The “Infant Death Rate” in Richland County is greater than the Healthy People 2020 goal, the national rate, and one comparison county rate. The “Infant Death Rate” in Medina, Portage, Summit, and Wayne counties did not meet the methodological criteria for identification as a significant health need.

**Medina County
Infant Death Rate
(per 1,000)**



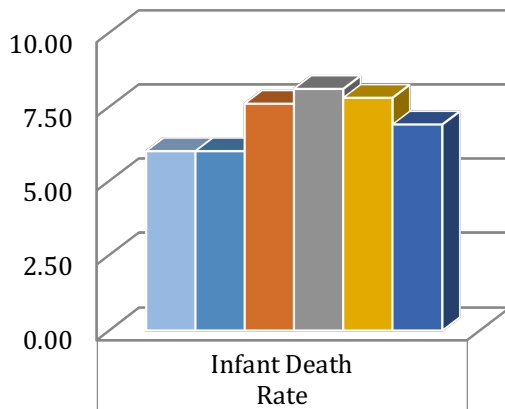
HP2020	6.00
US	6.00
Ohio	7.60
Medina	4.50
Clermont	6.50
Fairfield	5.70

**Portage County
Infant Death Rate
(per 1,000)**



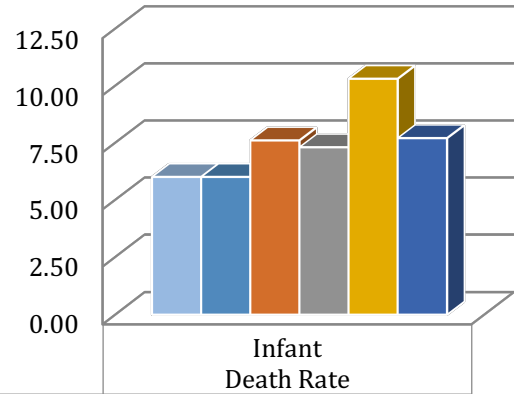
HP2020	6.00
US	6.00
Ohio	7.60
Portage	6.00
Greene	5.60
Wood	5.80

**Stark County
Infant Death Rate
(per 1,000)**



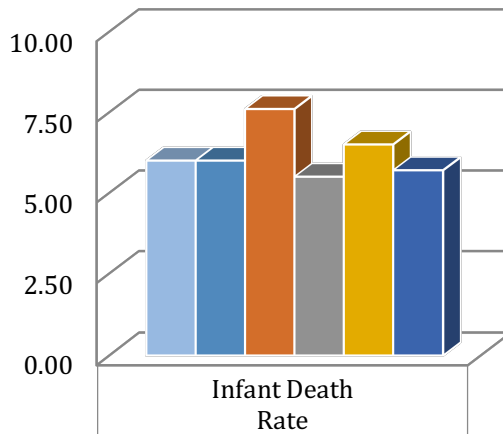
HP2020	6.00
US	6.00
Ohio	7.60
Stark	8.10
Butler	7.80
Lorain	6.90

**Summit County
Infant Death Rate
(per 1,000)**



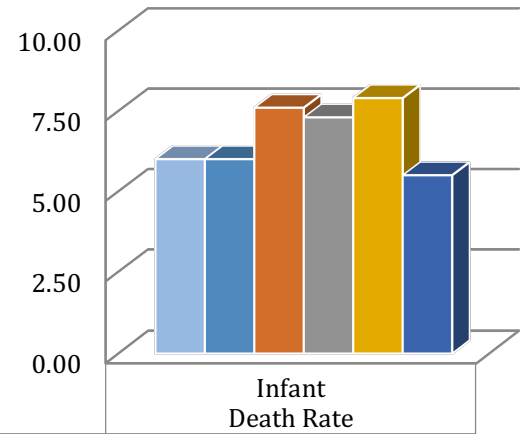
HP2020	6.00
US	6.00
Ohio	7.60
Summit	7.30
Hamilton	10.30
Montgomery	7.70

**Wayne County
Infant Death Rate
(per 1,000)**



HP2020	6.00
US	6.00
Ohio	7.60
Wayne	5.50
Clermont	6.50
Fairfield	5.70

**Richland County
Infant Death Rate
(per 1,000)**



HP2020	6.00
US	6.00
Ohio	7.60
Richland	7.30
Trumbull	7.90
Columbiana	5.50

Neonatal Death Rate 0 to 28 Days

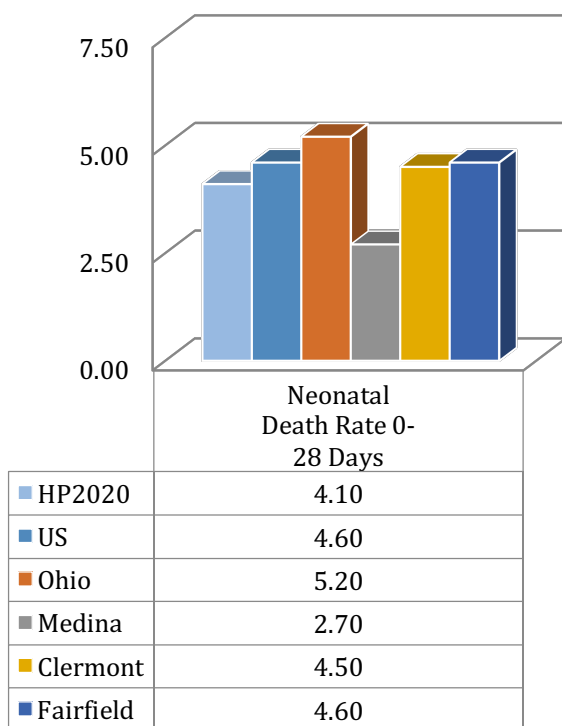
What is the data source for this indicator?

“Neonatal Death Rate 0 to 28 Days” is the number of neonates that die between their birth and 28th day of life, the rate of which is per 1,000 live births. The most recent data (2014) is utilized, which is sourced from death certificates provided by the Ohio Department of Health via the Office of Vital Statistics, and is available at www.networkofcare.org.

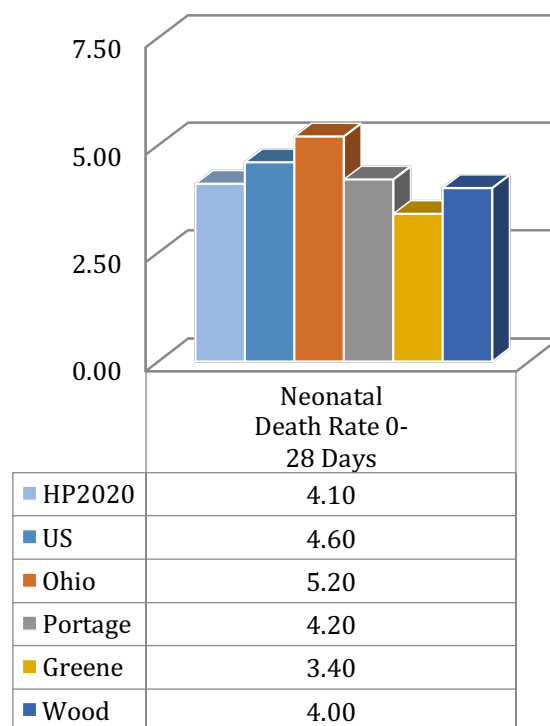
How does our community rank?

The “Neonatal Death Rate 0 to 28 Days” in Portage County exceeds the Healthy People 2020 goal, as well as both comparison county rates, while less than both the national and state rates. The “Neonatal Death Rate 0 to 28 Days” in Stark County is greater than the Healthy People 2020 goal, the state rate, and one comparison county rate, while less than the state rate and one comparison county rate. The “Neonatal Death Rate 0 to 28 Days” in Summit County is greater than the Healthy People 2020 goal, in addition to the national, state, and one comparison county rate, respectively, while being less than one comparison county rate. The “Neonatal Death Rate 0 to 28 Days” in Richland County exceeds the Healthy People 2020 goal, as well as the national, state, and one comparison county rate, respectively, while less than one comparison county rate. The “Neonatal Death Rate 0 to 28 Days” in Medina and Wayne counties did not meet the methodological criteria for identification as a significant health need.

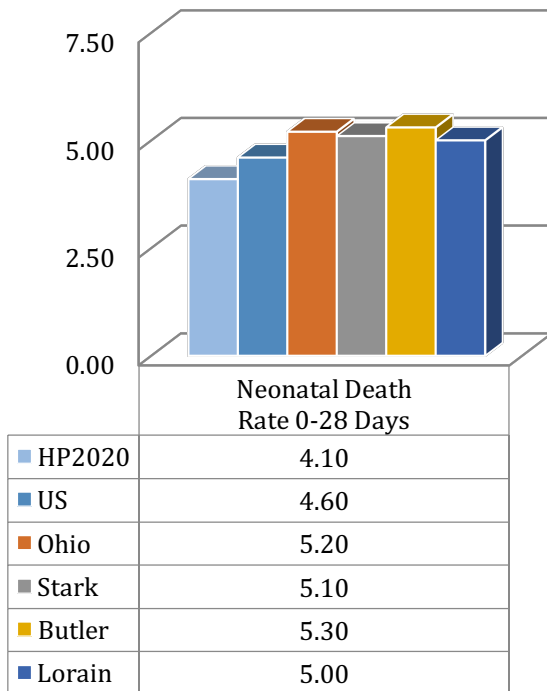
Medina County
Neonatal Death Rate 0 to 28 Days
(per 1,000)



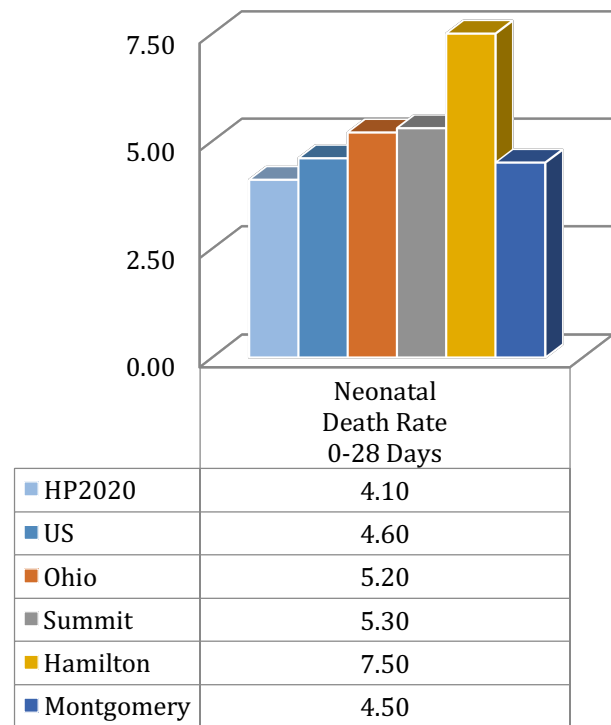
Portage County
Neonatal Death Rate 0 to 28 Days
(per 1,000)



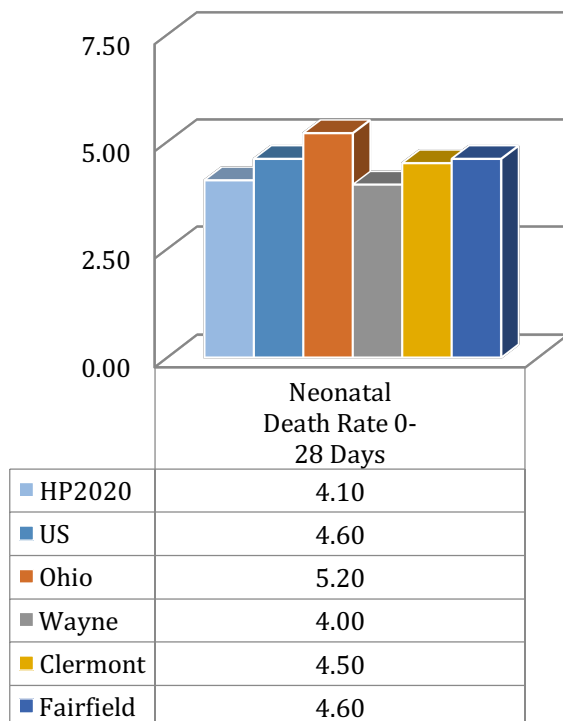
Stark County
Neonatal Death Rate 0 to 28 Days
(per 1,000)



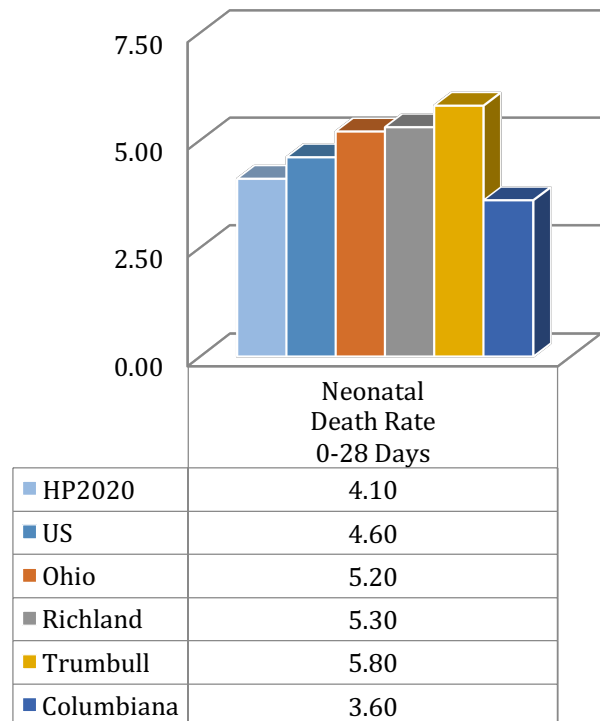
Summit County
Neonatal Death Rate 0 to 28 Days
(per 1,000)



Wayne County
Neonatal Death Rate 0 to 28 Days
(per 1,000)



Richland County
Neonatal Death Rate 0 to 28 Days
(per 1,000)



Postneonatal Death Rate 28 to 364 Days

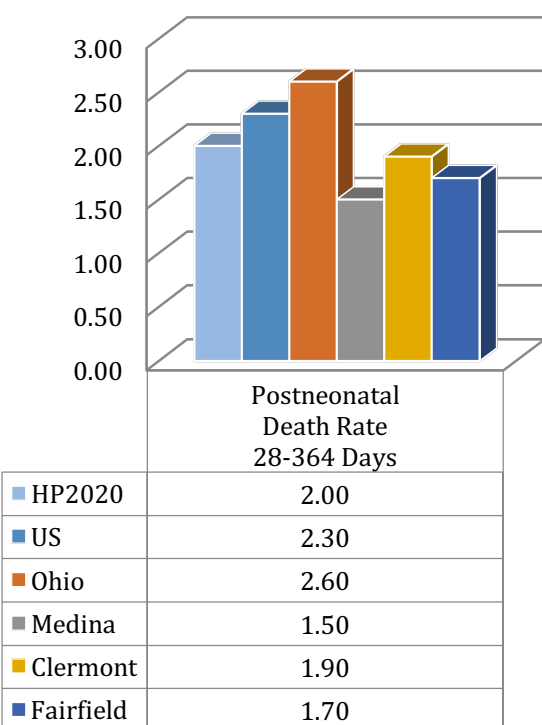
What is the data source for this indicator?

“Postneonatal Death Rate 28 to 364 Days” is the number of postneonates that die between their 28th and 364th day of life, the rate of which is per 1,000 live births. The most recent data (2014) is utilized, which is sourced from death certificates provided by the Ohio Department of Health via the Office of Vital Statistics, and is available at www.networkofcare.org.

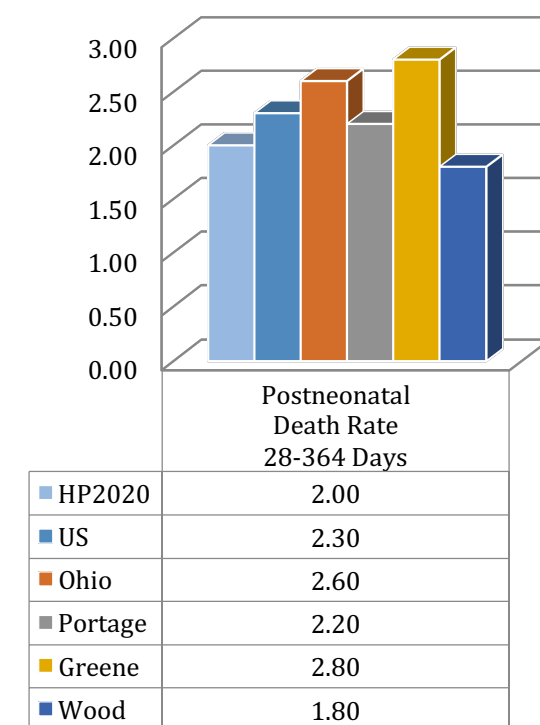
How does our community rank?

The “Postneonatal Death Rate 28 to 364 Days” in Stark County was greater than the Healthy People 2020 goal, as well as the national rate and one comparison county rate, and equal to the state and other included comparison county rates, respectively. The “Postneonatal Death Rate 28 to 364 Days” in Wayne County was greater than the Healthy People 2020 goal, as well as the national rate and both comparison county rates, and was equal to the state rate. The “Postneonatal Death Rate 28 to 364 Days” in Richland County exceeded the Healthy People 2020 goal, in addition to the national, state, and both comparison county rates, respectively. The “Postneonatal Death Rate 28 to 364 Days” in Medina, Portage, and Summit did not meet the methodological criteria for identification as a significant health need.

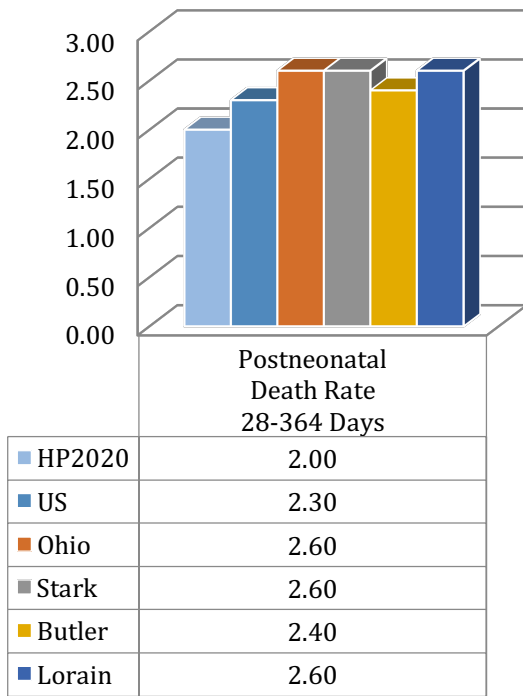
Medina County
Postneonatal Death Rate 28 to 364 Days
(per 1,000)



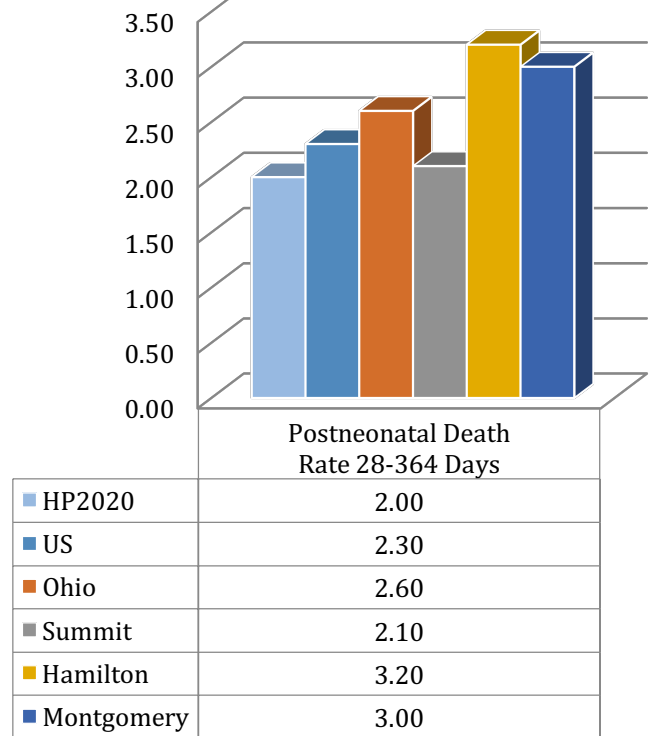
Portage County
Postneonatal Death Rate 28 to 364 Days
(per 1,000)



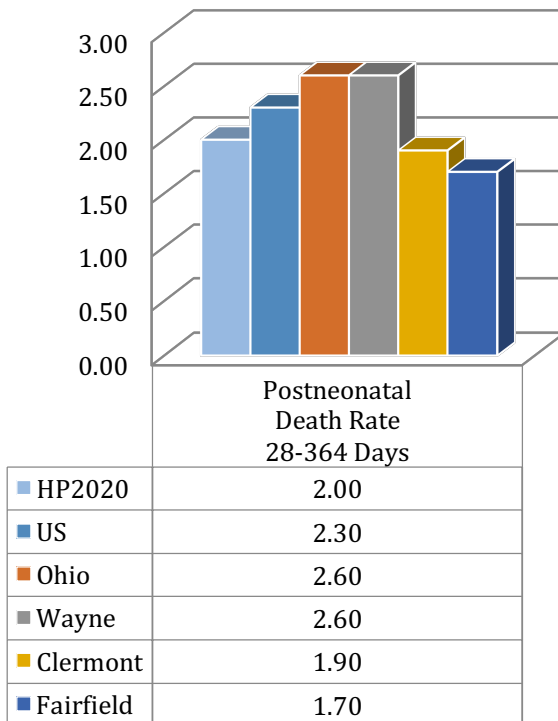
Stark County
Postneonatal Death Rate 28 to 364 Days
(per 1,000)



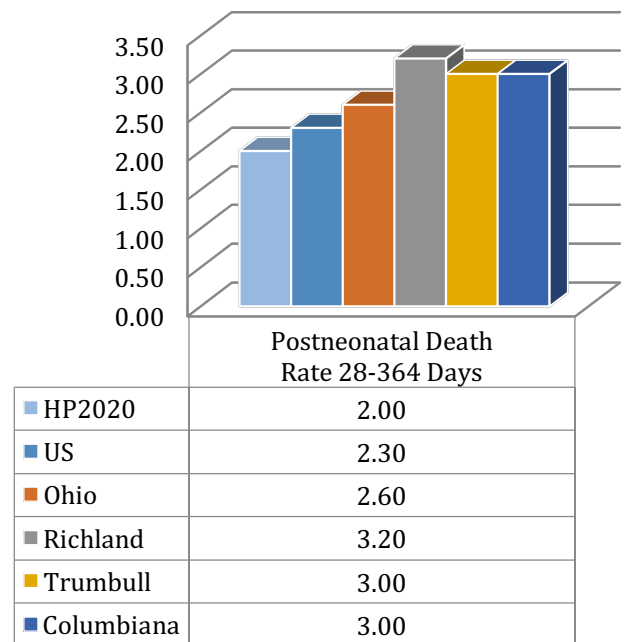
Summit County
Postneonatal Death Rate 28 to 364 Days
(per 1,000)



Wayne County
Postneonatal Death Rate 28 to 364 Days
(per 1,000)



Richland County
Postneonatal Death Rate 28 to 364 Days
(per 1,000)



Percentage of Infants with Low Birth Weight

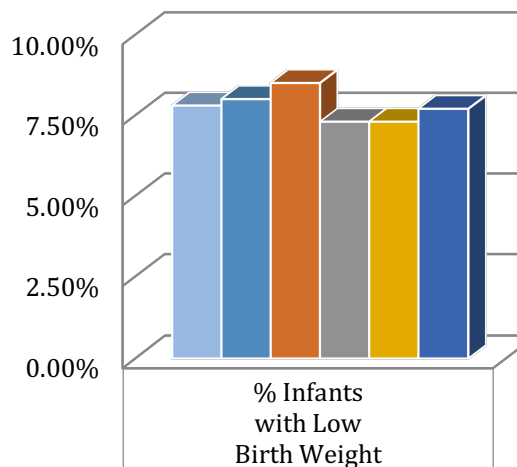
What is the data source for this indicator?

“Percentage of Infants with Low Birth Weight” is defined as the percentage of those born below 5 pounds 8 ounces. The most recent data (2013) is utilized here, which is collected by the Ohio Department of Health’s Center for Vital and Health Statistics, provided by Ohio’s Children Defense Fund, and is available at www.datacenter.kidscount.org.

How does our community rank?

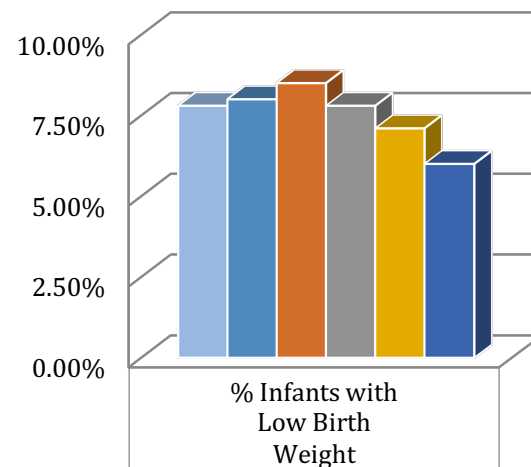
The “Percentage of Infants with Low Birth Weight” in Stark County is greater than the Healthy People 2020 goal, in addition to the national, state, and both comparison county percentages, respectively. The “Percentage of Infants with Low Birth Weight” in Medina, Portage, Summit, Wayne, and Richland counties did not meet the methodological criteria for identification as a significant health need.

**Medina County
Percentage of Infants
with Low Birth Weight**



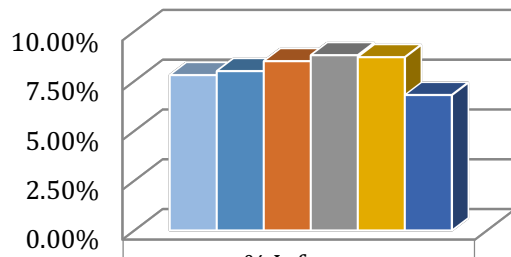
HP2020	7.80%
US	8.00%
Ohio	8.50%
Medina	7.30%
Clermont	7.30%
Fairfield	7.70%

**Portage County
Percentage of Infants
with Low Birth Weight**



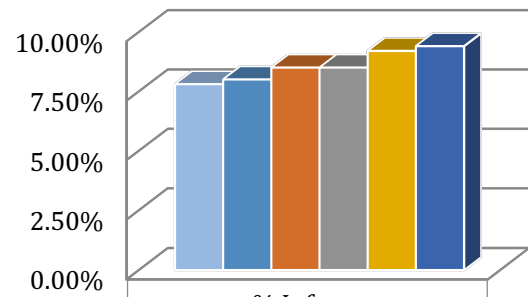
HP2020	7.80%
US	8.00%
Ohio	8.50%
Portage	7.80%
Greene	7.10%
Wood	6.00%

**Stark County
Percentage of Infants
with Low Birth Weight**



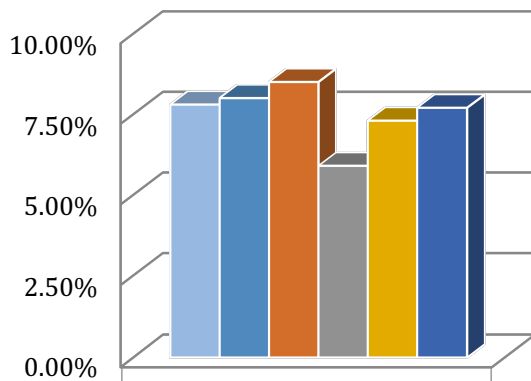
	% Infants with Low Birth Weight
HP2020	7.80%
US	8.00%
Ohio	8.50%
Stark	8.80%
Butler	8.70%
Lorain	6.80%

**Summit County
Percentage of Infants
with Low Birth Weight**



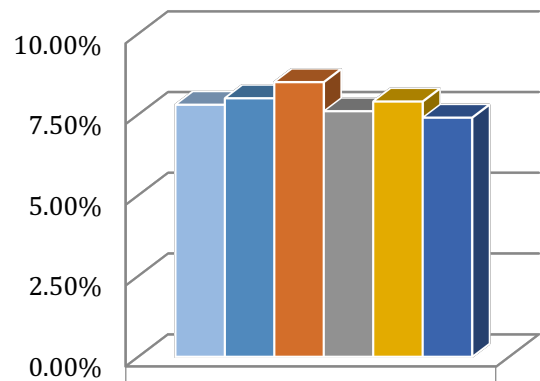
	% Infants with Low Birth Weight
HP2020	7.80%
US	8.00%
Ohio	8.50%
Summit	8.50%
Hamilton	9.20%
Montgomery	9.40%

**Wayne County
Percentage of Infants
with Low Birth Weight**



	% Infants with Low Birth Weight
HP2020	7.80%
US	8.00%
Ohio	8.50%
Wayne	5.90%
Clermont	7.30%
Fairfield	7.70%

**Richland County
Percentage of Infants
with Low Birth Weight**



	% Infants with Low Birth Weight
HP2020	7.80%
US	8.00%
Ohio	8.50%
Richland	7.60%
Trumbull	7.90%
Columbiana	7.40%

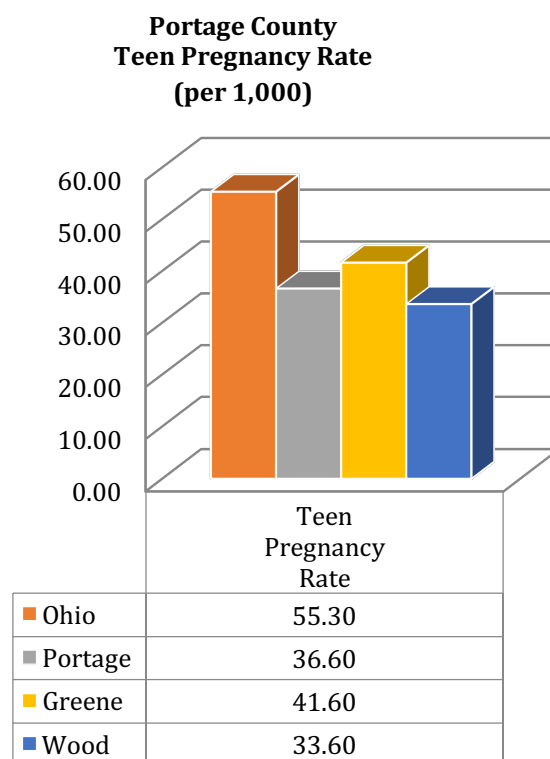
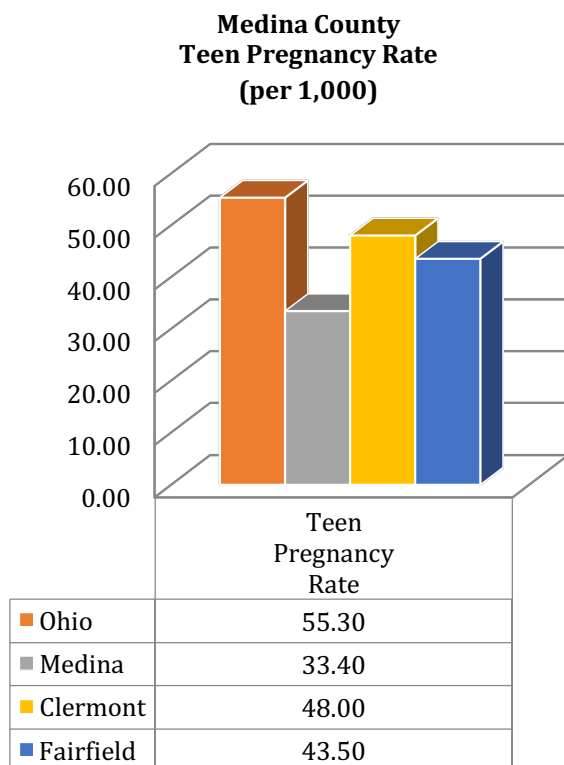
Teen Pregnancy Rate

What is the data source for this indicator?

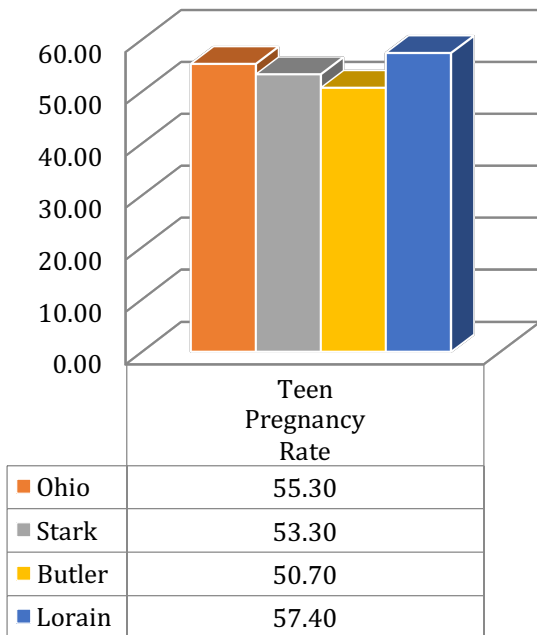
“Teen Pregnancy Rate” refers to the number of pregnancies, per 1,000 females, between the ages of 15 and 19, and includes live births, abortions, and estimated miscarriages. The most recent data (2010) is utilized here, which is provided by the Ohio Department of Health’s Office of Vital and Health Statistics, and is available at www.networkofcare.org.

How does our community rank?

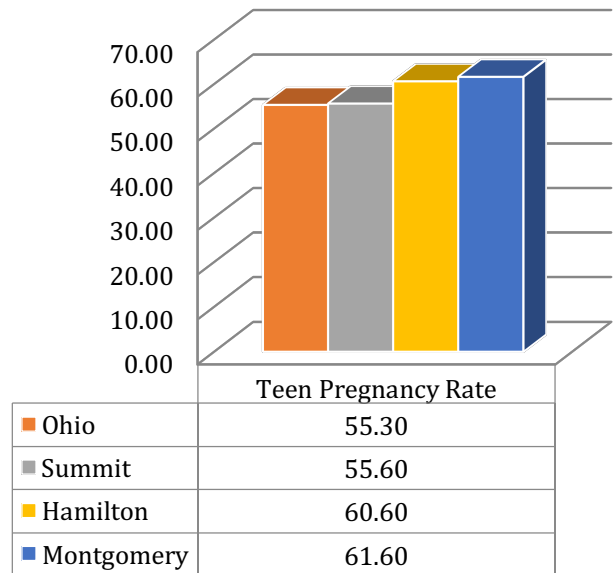
The “Teen Pregnancy Rate” in Richland County is greater than the state and both comparison county rates, respectively. The “Teen Pregnancy Rate” in Medina, Portage, Stark, Summit, and Wayne counties did not meet the methodological criteria for identification as a significant health need. A Healthy People 2020 goal and national rate were not available.



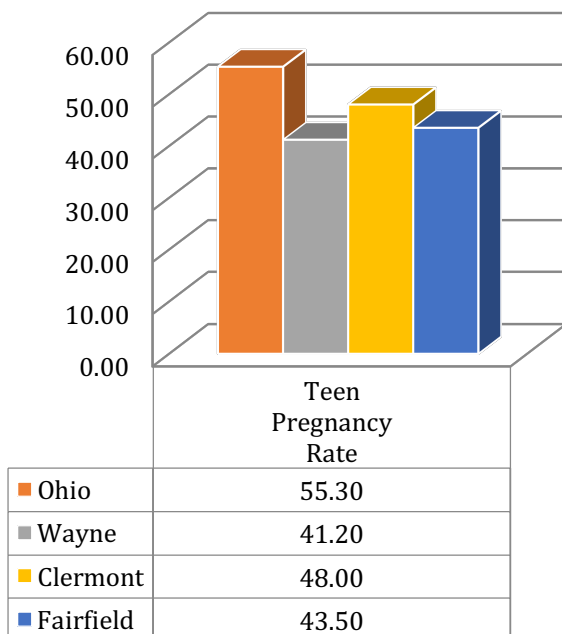
**Stark County
Teen Pregnancy Rate
(per 1,000)**



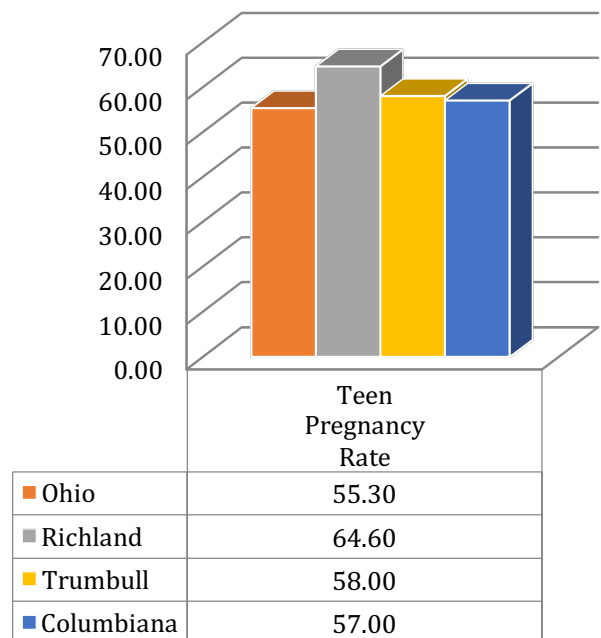
**Summit County
Teen Pregnancy Rate
(per 1,000)**



**Wayne County
Teen Pregnancy Rate
(per 1,000)**



**Richland County
Teen Pregnancy Rate
(per 1,000)**



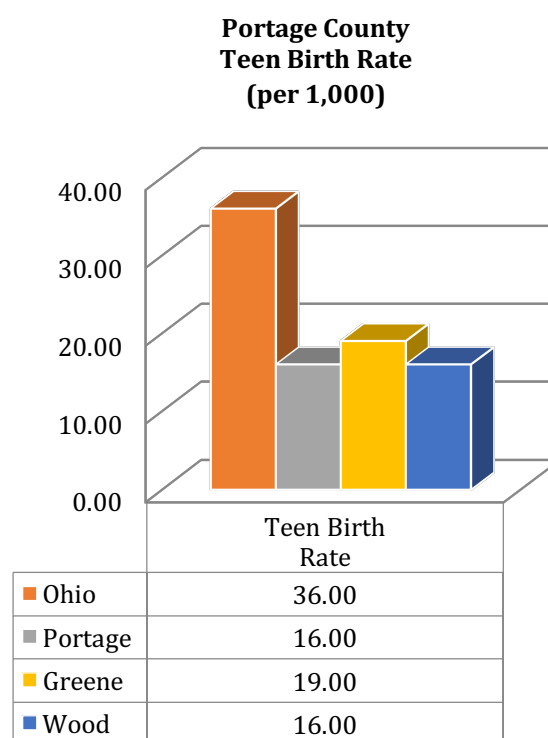
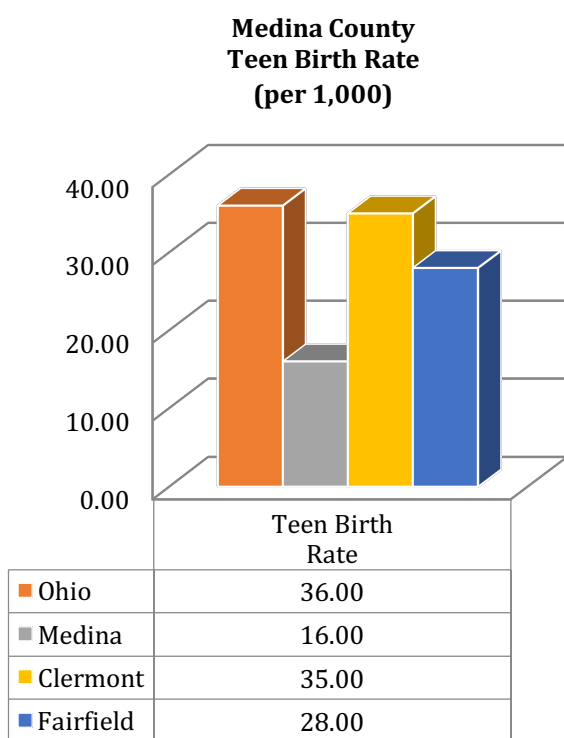
Teen Birth Rate

What is the data source for this indicator?

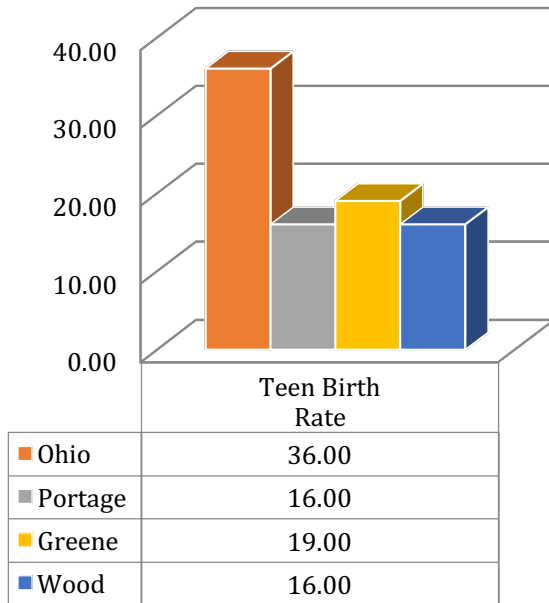
“Teen Birth Rate” is defined as the number of live births per 1,000 females between the ages of 15 and 19. The most recent data (2006-2012) is utilized here, which is provided by the National Center for Health Statistics, and is available at www.countyhealthrankings.org.

How does our community rank?

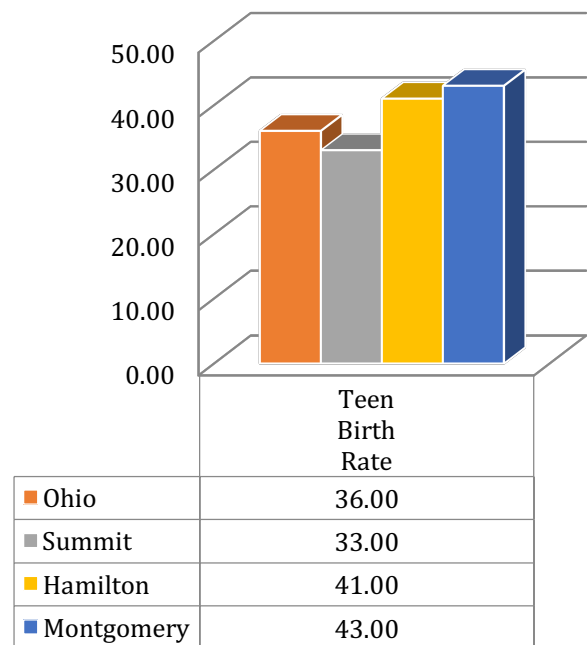
The “Teen Birth Rate” in Richland County exceeded the state and both comparison county rates, respectively. The “Teen Birth Rate” in Medina, Portage, Stark, Summit, and Wayne did not meet the methodological criteria for identification as a significant health need. A Healthy People 2020 goal and national rate were not available.



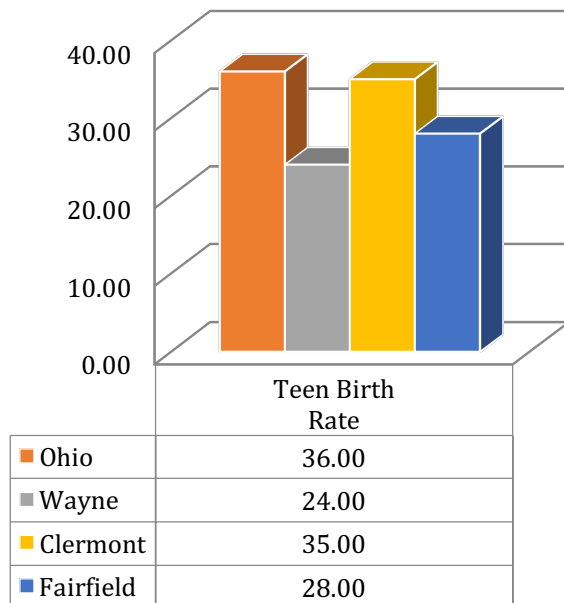
**Portage County
Teen Birth Rate
(per 1,000)**



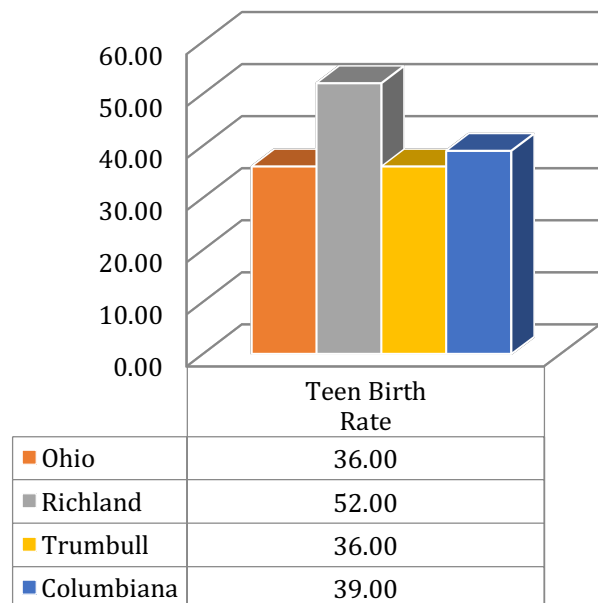
**Summit County
Teen Birth Rate
(per 1,000)**



**Wayne County
Teen Birth Rate
(per 1,000)**



**Richland County
Teen Birth Rate
(per 1,000)**



Mental Health

Mental health pertains to mental function and performance, in addition to the level of which an individual can participate in activities, share fulfilling relationships with others, adapt to change, and deal with adversity. According to the World Health Organization, mental health can be described as “the state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (WHO 2001). Diminished mental health is associated with poor health outcomes and reduced quality of life (Naylor et al. 2012).

The Mental Health issues identified as significant health needs in the Akron Children's Hospital service area are:

- ADHD/Autism
- Geographic access to services
- Self-Harm/Teen Suicide

Rate of Mental Health Problems Ages 0 to 18 Years

What is the data source for this indicator?

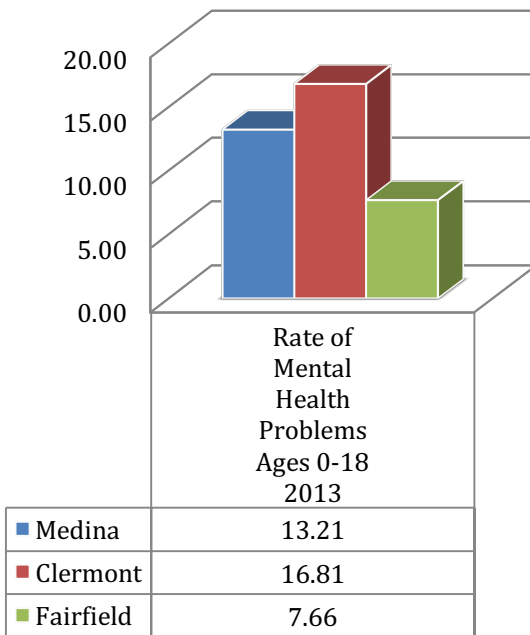
“Rate of Mental Health Problems Ages 0 to 18 Years” refers to the rate of mental health problems in children, ages 0 to 18, per 1,000 children. The most recent data (2013) is utilized here, which is provided by the Ohio Hospital Association, and is not consistent with the rest of the epidemiological data presented in this appendix, as it lacks Healthy People 2020, national, and state data, and did not meet the methodological criteria for identification as a significant health need. Inferences drawn from the following data should not be generalized beyond the scope of the included counties.

Community leaders also identified mental and behavioral health issues as a significant health problem in all six Akron Children’s Hospital service area counties. Focus group participants in Portage, Summit, Stark and Medina counties also identified child mental health as a significant health need within their communities. The Akron Children’s Hospital internal team of medical leaders and hospital administrators also agreed that mental health problems for children was a significant health need in their service area.

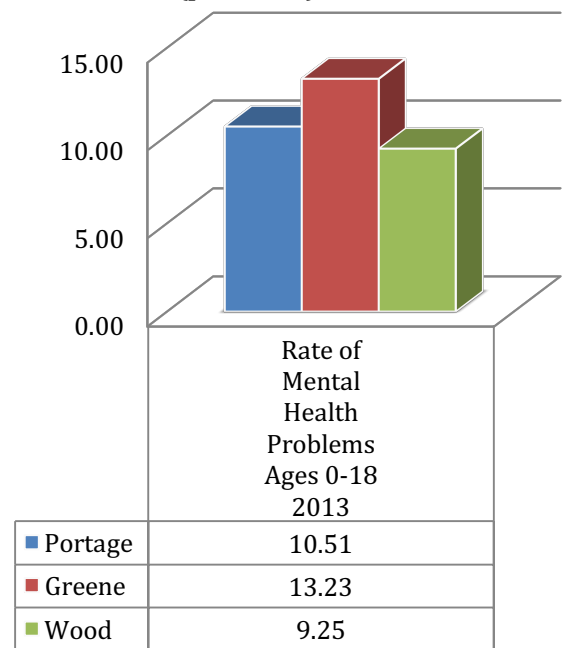
How does our community rank?

The “Rate of Mental Health Problems Ages 0 to 18 Years” was highest in Summit County, followed by Richland, Stark, Medina, Portage, and Wayne counties, respectively.

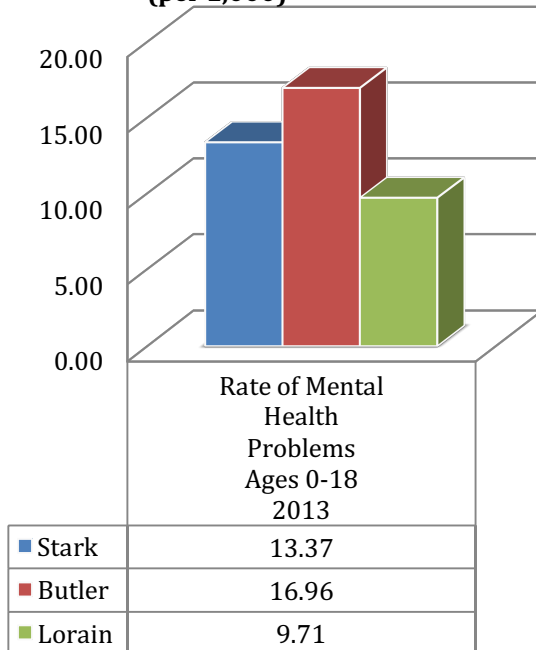
Medina County
Rate of Mental Health Problems
Ages 0 to 18
(per 1,000)



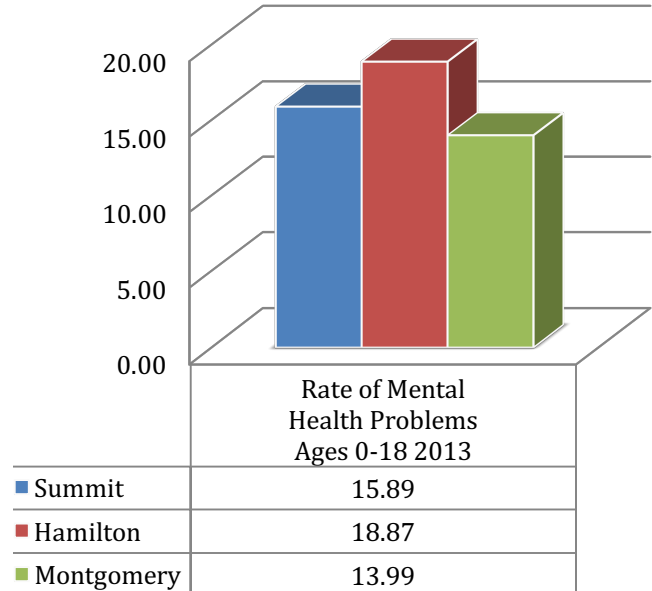
Portage County
Rate of Mental Health Problems
Ages 0 to 18
(per 1,000)

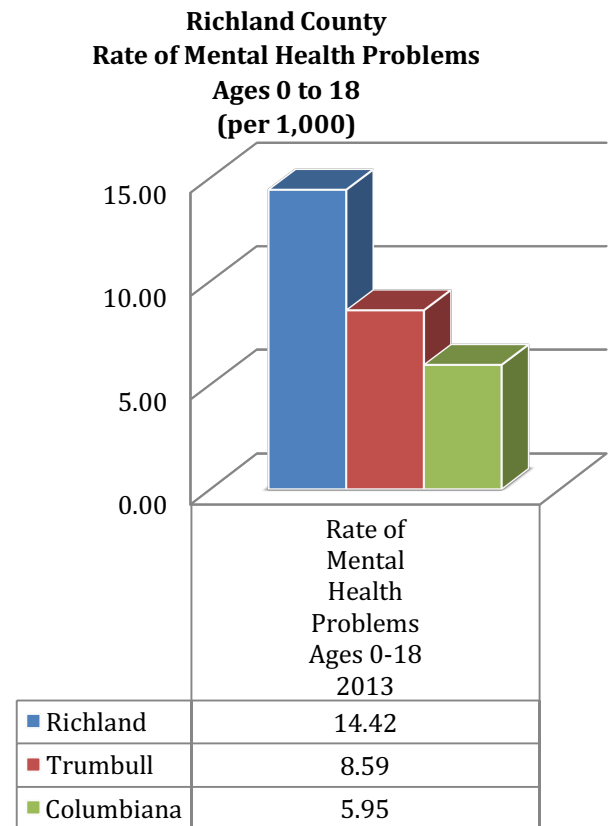
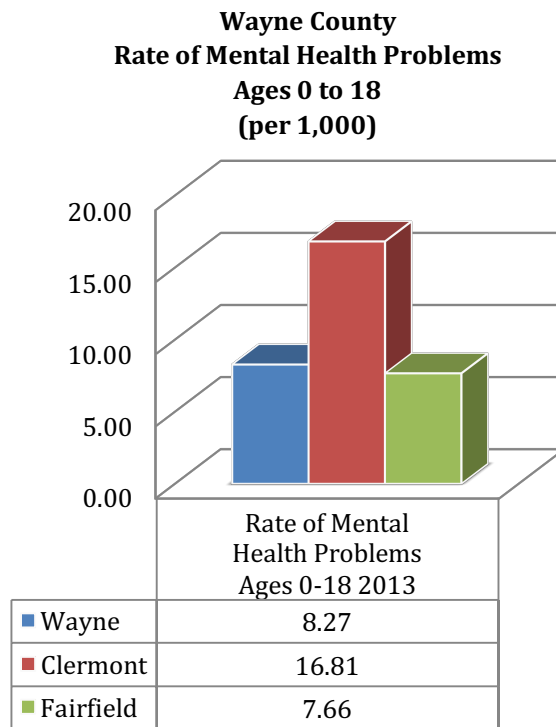


Stark County
Rate of Mental Health Problems
Ages 0 to 18
(per 1,000)



Summit County
Rate of Mental Health Problems
Ages 0 to 18
(per 1,000)





ADHD / Autism

ADHD is a chronic condition marked by persistent inattention, hyperactivity, and sometimes impulsivity. ADHD begins in childhood and often lasts into adulthood. As many as two out of three children with ADHD continue to have symptoms as adults. Autism is a neurodevelopmental disorder characterized by impaired social interaction, non-verbal communication and restricted and repetitive behavior. Symptoms often appear in the first two years of life.

The following conditions are now considered part of the autism spectrum, including autism spectrum disorder (ASD), Asperger's syndrome, pervasive developmental disorder, Rett syndrome and child disintegrative disorder. While sharing similar symptoms, the word spectrum indicates a range of severity among the conditions according to the latest version of the Diagnostic and Statistical Manual of mental Disorders (DSM). Epidemiological data were not available to compare the rates of ADHD or Autism in the Akron Children's Hospital service area counties to benchmark counties or to the state and nation. However, this problem was identified by community leaders in interviews conducted in every one of Akron Children's six-county service area. Furthermore, focus group participants in Summit, Medina and Wayne counties identified ADHD and autism as the second most significant health issue in their communities, tied with substance abuse.

Geographic Access to Services

Geographic access to services is defined as the ease or difficulty in seeking or attending health care services because of the patients' geographical residence or the geographical location or distribution of health care services. Frequently lack of access to reliable transportation limits patient's geographic access. This concept was not directly measured with epidemiological data. However, community leaders in every one of Akron Children's Hospital's service area counties identified this as a significant health problem. Furthermore, it was also identified as a prominent problem by focus group participants in Summit County.

Self-Harm/Teen Suicide

According to the Mayo Clinic, self-harm involves "deliberately harming the surface of your own body, such as cutting or burning yourself. It's typically not meant as a suicide attempt. Rather, this type of self-injury is an unhealthy way to cope with emotional pain, intense anger and frustration." Self harm was not directly measured as such in the epidemiological data, nor was it expressed in 2016 as a current problem in the focus group results in the six-county service area. However, teen suicide was identified as having been a significant health issue in Medina County in recent years through community leader interviews.

Substance Abuse

The main substance abuse issues identified as significant health needs in the Akron Children's service area include:

- Opioid/Heroin Use and Abuse
- Neonatal abstinence syndrome

Opioid / Heroin Use and Abuse

Opioids are medications that relieve pain. They reduce the intensity of pain signals reaching the brain and affect those brain areas controlling emotion, which diminishes the effects of a painful stimulus. Medications that fall within this class include hydrocodone (e.g., Vicodin), oxycodone (e.g., OxyContin, Percocet), morphine (e.g., Kadian, Avinza), codeine, and related drugs. Longer term use or abuse of opioids can lead to physical dependence and, in some cases, addiction (National Institute of Drug Abuse 2014). The emergence of chemical tolerance toward prescribed opioids, perhaps combined with an increasing difficulty in obtaining these medications illegally, may in some instances explain the transition to abuse of heroin, which is cheaper and in some communities easier to obtain than prescription opioids. Heroin is also being mixed with other extremely dangerous drugs such as Fentanyl. The latest Ohio Department of Health Ohio *Drug Overdose Data at a Glance* documents that the number of unintended Fentanyl-related drug overdoses increased in Ohio from 75 in 2012 to 1155 in 2015, an explosive rate of growth.

While epidemiological data were not available to measure Akron Children's Hospital counties against benchmark counties, the state and the nation on these indicators, community leaders interviewed in all six of the hospital's service counties identified both opioid and heroin use as

one of the top three significant health concerns along with neonatal abstinence syndrome. Alcohol abuse and marijuana use were also identified by community leaders as problems in Summit, Medina and Portage counties. Focus group participants in Summit, Medina and Stark counties also identified opioid and heroin use and abuse as a problem in their areas.

Neonatal Abstinence Syndrome

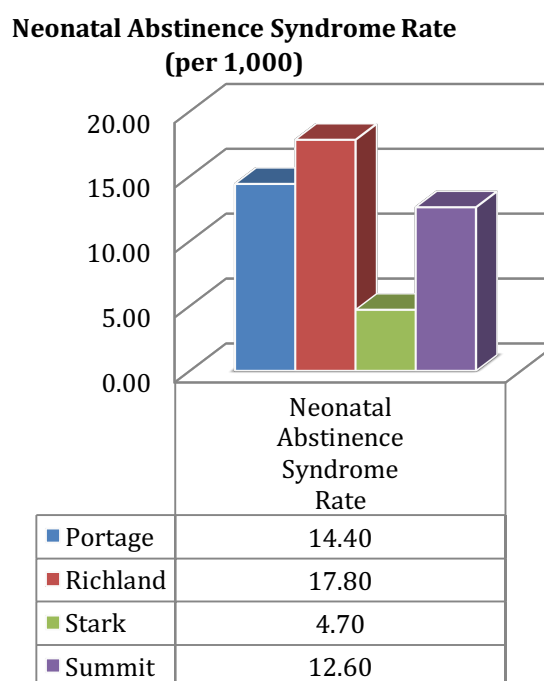
Neonatal abstinence syndrome occurs when babies are born exposed to opiates and experience withdrawal symptoms.

What is the data source for this indicator?

“Neonatal Abstinence Syndrome” refers to the rate of neonates that are born with illicit substance abstinence syndrome. Neonatal abstinence syndrome occurs when babies are born exposed to opiates and experience withdrawal symptoms. The following data was provided by the Ohio Hospital Association and is not consistent with the rest of the epidemiological data presented in this appendix, as it lacks Healthy People 2020, national, and state data, and did not meet the methodological criteria for identification as a significant health need. Inferences drawn from the following data should not be generalized beyond the scope of the included counties. Neonatal abstinence syndrome was further identified as a significant health problem by community leaders in all six of the counties served by Akron Children’s Hospital.

How does our community rank?

The “Neonatal Abstinence Syndrome Rate” was the highest in Richland County, followed by Portage, Summit, and Stark counties, respectively. Data for both Medina and Wayne counties were not available.



References

- Agrawal, P. (2015). Maternal mortality and morbidity in the United States of America. *Bulletin of the World Health Organization*, 93(3), 135-135.
- Boyce, W. T., & Ellis, B. J. (2005). Biological sensitivity to context: I. An evolutionary–developmental theory of the origins and functions of stress reactivity. *Development and psychopathology*, 17(02), 271-301.
- Centers for Disease Control and Prevention (CDC). (2015). CDC Childhood Injury Report. Retrieved September 22, 2016, from http://www.cdc.gov/safechild/Child_Injury_Data.html
- Centers for Disease Control and Prevention (CDC). (2015). Childhood Obesity and Consequences. Retrieved September 12, 2016, from <http://www.cdc.gov/obesity/childhood/causes.html>
- Centers for Disease Control and Prevention (CDC). (2015). Defining Childhood Obesity. Retrieved September 12, 2016, from <http://www.cdc.gov/obesity/childhood/defining.html>
- Centers for Disease Control and Prevention (CDC). (2016). All Injuries. Retrieved September 12, 2016, from <http://www.cdc.gov/nchs/fastats/injury.htm>
- Centers for Disease Control and Prevention (CDC). (2016). Child Abuse and Neglect. Retrieved September 12, 2016, from <http://www.cdc.gov/ViolencePrevention/childmaltreatment/consequences.html>
- Centers for Disease Control and Prevention (CDC). (2016). Early Childhood Education. Retrieved September 21, 2016, from <http://www.cdc.gov/policy/hst/hi5/earlychildhoodeducation/index.html>.
- Centers for Disease Control and Prevention (CDC). (2016). Maternal and Infant Health. Retrieved September 12, 2016, from <http://www.cdc.gov/reproductivehealth/maternalinfanthealth/>.
- Clemans-Cope, L., Kenney, G., Waidmann, T., Huntress, M., & Anderson, N. (2015). How well is CHIP addressing health care access and affordability for children?. *Academic pediatrics*, 15(3), S71-S77.
- Flora, G., Gupta, D., & Tiwari, A. (2012). Toxicity of lead: a review with recent updates. *Interdiscip Toxicol*, 5(2), 47-58.
- Mayo Clinic Staff (2016). Retrieved from <http://www.mayoclinic.org/diseases-conditions/self-injury/home/ovc-20165425>.
- Nackers, L. M., & Appelhans, B. M. (2013). Food insecurity is linked to a food environment promoting obesity in households with children. *Journal of nutrition education and behavior*, 45(6), 780-784.
- Nellis, A. (2012). The lives of juvenile lifers: Findings from a national survey. The Sentencing Project. Retrieved from: http://www.sentencingproject.org/detail/publication.cfm?publication_id=390

- Pomerantz, W. J. (2015). Serious Unintentional Injuries to Ohio Children: Is There Urban/Rural Variation?. In *2015 AAP National Conference and Exhibition*. American Academy of Pediatrics.
- Shonkoff, J. P., Boyce, W. T., & McEwen, B. S. (2009). Neuroscience, molecular biology, and the -childhood roots of health disparities: building a new framework for health promotion and disease prevention. *Jama*, 301(21), 2252-2259.
- U.S. Department of Health and Human Services (HHS), Administration on Children, Youth and Families, Children's Bureau. (2016). Child Maltreatment 2014. Retrieved September 12, 2016, from <http://www.acf.hhs.gov/sites/default/files/cb/cm2014.pdf>.