

# Pritzker Targeted Communities Project Methodology

## INTRODUCTION

The Targeted Communities Project was completed throughout the spring of 2023 in order to extend a 3-year grant that Pennsylvania Partnerships for Children (PPC) previously received from the Pritzker Children's Initiative (PCI). This grant extension is intended to be used to improve child outcomes in Pennsylvania specifically related to the areas of:

- Nutrition
- Maternal Health
- Early intervention

PCI has a strong emphasis on ensuring that historically underinvested and/or marginalized communities are connected with the resources they want and need to succeed. "Historically underinvested and marginalized communities" can be defined as:

1. Those that lack public and private funding (whether that be federal and state dollar or philanthropic investment) and/or
2. Where federal and state policies have disproportionately impacted the most vulnerable communities

Underinvestment in communities often manifests in severe disparities in areas such as: income, maternal care, child care, wealth, health, education, and housing. For this reason, a comprehensive analysis of county-level data was conducted to identify which communities in Pennsylvania yielded the poorest outcomes as well as the highest disparities across each of the three areas of focus. Three separate analyses were conducted using numerous data points to characterize counties on their level of perceived vulnerability related to each focus area.

## TARGETED UNIVERSALISM

A targeted universalism framework is at the core of this project.

- Principles of targeted universalism:
  - Setting universal goals and using targeted processes to achieve those goals
  - Extremely goal-oriented, looking at strategies that will yield the best outcomes for all parties concerned
  - Strategies are based upon how different groups are situated across different structures, cultures, and geographies

Targeted universalism centers around the idea that targeting strategies for change to the specific needs and interests of a singular group will ultimately lead to meeting universal goals of an entire system. In other words, this project operated under the assumption that targeting policy efforts to improve conditions in the counties most vulnerable for adverse outcomes will have a ripple effect and ultimately improve the well-being for all children across the state.

## DATA SOURCES

Data included in the analysis came from a variety of sources. While data at the township or even zip code level would have been more ideal for identifying communities most in need, all data is at the county-level due to issues with general availability as well as suppression caused by low number counts. The majority of data points came from:

- County Health Rankings
- Family Support Needs Assessment
- KIDS COUNT Data Center
- Maternal Vulnerability Index
- Opportunity Index
- Social Vulnerability Index

Most of these data sources created composite scores and prevalence rates by drawing upon raw data obtained by public surveys and government databases, including:

- U.S. Census Bureau
- Pennsylvania Department of Health
- Pennsylvania Department of Human Services
- Pennsylvania Department of Education
- U.S. Department of Health & Human Services
- U.S. Department of Agriculture

## WEIGHTING

Many of the same data points are included in the analyses of all three focus areas, as nutrition, maternal health, and early intervention are all related to physical wellbeing and therefore are affected by the many of the same social deterrents of health. To ensure that certain data points distinctive to each focus area were given higher priority in each individual analysis, and each analysis yielded results representative of its respective focus area, data points were arranged into four categories. These categories were weighted based on significance to the area of focus and are defined below in Table 1.

<b>CATEGORY</b>	<b>WEIGHT</b>	<b>DEFINITION</b>
<b>Racial Disparity</b>	12.0	Data points related to racial & ethnic minority status, or racial disparity ratios*
<b>Main Indicator</b>	4.0	Data points significantly related to the area of focus

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\* Black-White comparison ratios were calculated for certain indicators that could be disaggregated by race in areas specifically known for disparities. Interpersonal, systemic, and structural forms of racism have shaped patterns of access to and quality of healthcare in America, as well as overall health outcomes. It is therefore important to note that race-related data points are included with such a high weight to reflect racism as a root cause of many disparities, rather than 'race' being considered a risk factor.

<b>Direct Factor</b>	2.0	Data points that could play a role in effecting main indicators
<b>Social Determinant of Health</b>	1.0	Social factors within the environments people live, work, and interact that indirectly effect health outcomes

The specific weights assigned to every data point in the analyses of all three areas of focus are described below in Table 2.

<b>TABLE 2: DATA POINTS BY AREAS OF FOCUS &amp; WEIGHT</b>						
<b>INDICATOR</b>	<b>NUTRITION</b>		<b>MATERNAL HEALTH</b>		<b>EARLY INTERVENTION</b>	
	✓	WEIGHT	✓	WEIGHT	✓	WEIGHT
<b>Abuse Against Postpartum &amp; Pregnant Women</b>			✓	2.0	✓	4.0
<b>Access to Primary Health Care</b>	✓	1.0	✓	4.0	✓	4.0
<b>Affordable Housing</b>	✓	2.0				
<b>Breastfeeding</b>	✓	4.0	✓	2.0	✓	2.0
<b>Broadband Internet Subscription</b>	✓	1.0	✓	1.0	✓	2.0
<b>Child Care Subsidy</b>					✓	4.0
<b>Child Food Insecurity</b>	✓	4.0				
<b>Child Poverty</b>	✓	2.0	✓	1.0	✓	2.0
<b>Childhood Obesity</b>	✓	4.0				
<b>Children with Disabilities</b>					✓	4.0
<b>Clinical Care</b>	✓	1.0	✓	1.0	✓	1.0
<b>Early Intervention (PART C) Enrollment</b>					✓	4.0
<b>Educational Attainment</b>	✓	2.0			✓	2.0
<b>Food Environment</b>	✓	4.0				
<b>Food Insecurity of Population</b>	✓	4.0				
<b>Free or Reduced Price Lunch</b>	✓	4.0				
<b>General Healthcare</b>			✓	2.0		
<b>Health Behaviors</b>			✓	1.0		
<b>Health Insurance Status of Children</b>	✓	2.0			✓	4.0
<b>Health Insurance Status of Population</b>			✓	4.0		
<b>High-Quality Early Childhood Education</b>					✓	4.0
<b>Household Characteristics</b>	✓	1.0			✓	1.0

Household Type	✓	1.0	✓	1.0	✓	1.0
Housing Type & Transportation	✓	1.0	✓	1.0	✓	1.0
Income	✓	2.0	✓	1.0	✓	2.0
Income Inequality	✓	2.0	✓	1.0	✓	2.0
Infant Mortality			✓	4.0		
Labor Force Status	✓	1.0			✓	1.0
Limited Access to Healthy Food	✓	4.0				
Low Birth Weight			✓	4.0	✓	4.0
Maternal Depression			✓	4.0	✓	2.0
Maternal Tobacco Use			✓	4.0	✓	4.0
Maternal Vulnerability			✓	4.0	✓	2.0
Maternity Care Desert			✓	4.0		
Medicaid Births	✓	2.0	✓	2.0	✓	2.0
Mental Health & Substance Abuse			✓	2.0		
Mental Health Providers			✓	4.0		
Mother's Education			✓	1.0		
Pediatricians					✓	4.0
Physical Environment	✓	1.0	✓	1.0	✓	1.0
Physical Health			✓	2.0		
Postpartum High-Risk Opioid Use			✓	4.0		
Pregnancy & Postpartum Substance Use Disorder			✓	4.0	✓	4.0
Prenatal Care			✓	4.0	✓	4.0
Preschool Enrollment					✓	4.0
Preterm Births			✓	4.0	✓	4.0
Public Assistance	✓	2.0	✓	2.0	✓	2.0
Quality of Life	✓	1.0	✓	1.0	✓	1.0
Racial & Ethnic Minority Status of Children	✓	12.0	✓	12.0	✓	12.0
Racial & Ethnic Minority Status of Population	✓	12.0	✓	12.0	✓	12.0
Racial Disparity in Low Birth Weight			✓	12.0	✓	12.0
Racial Disparity in Prenatal Care			✓	12.0	✓	12.0
Racial Disparity in Preterm Births			✓	12.0	✓	12.0
Racial Disparity in WIC Births	✓	12.0	✓	12.0	✓	12.0

Reproductive Healthcare			✓	2.0		
SNAP Enrollment	✓	4.0	✓	2.0	✓	2.0
SNAP-Authorized Stores	✓	4.0	✓	2.0		
Social & Economic Factors	✓	1.0	✓	1.0	✓	1.0
Socioeconomic Determinants			✓	1.0		
Socioeconomic Status	✓	1.0	✓	1.0	✓	1.0
TANF Enrollment	✓	4.0	✓	2.0	✓	2.0
Unemployment	✓	2.0	✓	1.0	✓	2.0
WIC Births	✓	4.0	✓	2.0	✓	2.0
WIC Redemptions	✓	4.0	✓	2.0		
WIC-Authorized Stores	✓	4.0	✓	2.0		
Young Mothers			✓	1.0		

### DETERMINING COUNTY RANKINGS

The determination of county rankings across all focus areas can be sorted into three steps:

**1. Rescale Data to Common Measure with Positive Correlation**

- These analyses consisted of data in the form of percentages, rates, and dollar values. Data points also varied in the direction of their correlation with vulnerability related to nutrition, maternal health, and early intervention.
  - For example, a county with the highest (↑) rate of food insecurity would be indicative of high (↑) nutritional vulnerability, while a county with the lowest (↓) median family income would also be indicative of high (↑) nutritional vulnerability.
- In order to systematically compare these varying statistics across all 67 counties of Pennsylvania, the data had to first be rescaled to a common measure. Rescaling was done by ranking every county between 1 and 67 based on its numerical outcome related to the data point.
- Variables can either have a positive or negative correlation with one another.
  - A positive correlation exists when variables move in the same direction, meaning that as one variable increases so does the other (↑↑), or when one variable decreases so does the other (↓↓).
  - A negative correlation exists when variables move in opposite directions, meaning as one variable increases the other decreases (↑↓), or when one variable decreases the other increases (↓↑).
- To ensure all data points were calculated with a positive correlation, they were ranked in either descending or ascending order (depending on the nature of the data point) so that a ranking of 1 would consistently represent low (↓) vulnerability and a ranking of 67 would consistently represent high (↑) vulnerability in relation to the respective focus area.

- An example of how all data points were rescaled to a common measure with positive correlation is provided below in Table 3.

TABLE 3: RESCALE DATA TO COMMON MEASURED WITH POSITIVE CORRELATION								
RESCALE DATA TO RANKINGS								
	Data Point 1 (↑↑)		Data Point 2 (↑↓)		Data Point 3 (↓↓)		Data Point 4 (↓↑)	
	Estimate	Ranking	Estimate	Ranking	Estimate	Ranking	Estimate	Ranking
County A	13.41%	2	\$44,284	2	69	2	70.5	3
County B	37.08%	3	\$46,746	1	474	3	80.3	2
County C	4.55%	1	\$39,305	3	10	1	84.6	1
RANK COUNTIES SO: 1 = LOW VULNERABILITY 67 = HIGH VULNERABILITY								
Type of Correlation	Positive		Negative		Positive		Negative	
Data Point Form & Direction of Correlation	Data Point 1 is in the form of a percentage and a high (↑) estimate indicates high (↑) vulnerability		Data Point 2 is in the form of a dollar value and a high (↑) estimate indicates low (↓) vulnerability		Data Point 3 is in the form of a raw number and a low (↓) estimate indicates low (↓) vulnerability		Data Point 4 is in the form of a population rate and a low (↓) estimate indicates high (↑) vulnerability	
Explanation of Ranking	County B is ranked 3 because it has the highest estimate, County A is ranked 1 because it has the lowest estimate, and County C is ranked 2 because it's estimate is in the middle		County C is ranked 3 because it has the lowest estimate, County B is ranked 1 because it has the highest ranking, and County A is ranked 2 because its estate is in the middle		County B is ranked 3 because it has the highest estimate, County C is ranked 1 because it has the lowest estimate, and County A is ranked 2 because it's estimate is in the middle		County A is ranked 3 because it has the lowest ranking, County C is ranked 1 because it has the highest ranking, and County B is ranked 2 because it's estimate is in the middle	

*In this example, there are three counties being examined in terms of four data points, but in the actual analysis there were 67 counties being examined in terms of 42+ data points*

## 2. Calculate Rankings with Weights

- Once all the data points were rescaled to county rankings between 1 and 67 with consistent correlation directionality, weights were assigned with dependence on varying significance to the focus area.
  - As defined in the previous section, weights were categorized as follows:
    - Racial Disparity: 12.0
    - Main Indicator: 4.0
    - Direct Factor: 2.0
    - Social Determinant of Health: 1.0
- To assign weights, the rankings of each data point were multiplied by their respective weight category.
- An example of how overall rankings were calculated with weights to reflect a data point's significance to the area of focus is provided below in Table 4.

TABLE 4: CALCULATE RANKINGS WITH WEIGHTS								
ASSIGN WEIGHT CATEGORIES								
Weight Category	Racial Disparity		Main Indicator		Direct Factor		Social Determinant of Health	
Description of Weight Category	Data Point 1 is related to racial & ethnic minority status, or racial disparity ratios, so it is weighted 12.0		Data Point 2 is significantly related to the area of focus, so it is weighted 4.0		Data Point 3 could play a role in effecting main indicators, so it is weighted 2.0		Data Point 4 is a social factor that indirectly effects health outcomes, so it is weighted 1.0	
MULTIPLY RANKINGS BY WEIGHT								
	Data Point 1 (↑↑)		Data Point 2 (↑↓)		Data Point 3 (↓↓)		Data Point 4 (↓↑)	
	Ranking	Weight	Ranking	Weight	Ranking	Weight	Ranking	Weight
County A	2	12.0	2	4.0	2	2.0	3	1.0
County B	3	12.0	1	4.0	3	2.0	2	1.0
County C	1	12.0	3	4.0	1	2.0	1	1.0
CALCULATE RANKINGS WITH WEIGHTS								
County A	2(12) = 24		2(4) = 8		2(2) = 4		3(1) = 3	
County B	3(12) = 36		1(4) = 4		3(2) = 6		2(1) = 2	
County C	1(12) = 12		3(4) = 12		1(2) = 2		1(1) = 1	

*In this example, there are three counties being examined in terms of four data points, but in the actual analysis there were 67 counties being examined in terms of 42+ data points*

### 3. Re-Rank the Weighted Totals

- After the individual county rankings for each data points were appropriately weighted, each of the weighted rankings were added together. The last step of the analysis then consisted of re-ranking the weighted totals in order to formulate overall county rankings.
  - This was done by simply ranking the overall weighted totals so:
    - The county with the highest value would be ranked at 67, representing the highest vulnerability in its respective focus area.
    - The county with the lowest value would be ranked 1, representing the lowest vulnerability in its respective focus area.
- An example of how counties were re-ranked based on the weighted totals is provided below in table 5.

TABLE 5: RE-RANK THE WEIGHTED TOTALS					
CALCULATE THE SUM OF THE WEIGHTED RANKINGS					
	Data Point 1 (↑↑)	Data Point 2 (↑↓)	Data Point 3 (↓↓)	Data Point 4 (↓↑)	Sum of Weighted Rankings
County A	24	8	4	3	39
County B	36	4	6	2	48
County C	12	12	2	1	27
CALCULATE OVERALL COUNTY RANKINGS					
	Sum of Weighted Rankings			Overall County Rankings	

County A	39	2
County B	48	3
County C	27	1
<b>EXPLANATION OF OVERALL COUNTY RANKINGS</b>		
County A	County A is ranked 2 because it's overall score is in the middle, indicating moderate vulnerability	
County B	County B is ranked 3 because it has the highest overall score, indicating high vulnerability	
County C	County C is ranked 1 because is has the lowest overall score, indicating low vulnerability	

## DATA POINT DEFINITIONS, SOURCES, & RELEVANCE

### NUTRITION

<b>Access to Primary Health Care</b>	
<b>Definition:</b>	Rate of primary care physicians (per 100,000 population)
<b>Year:</b>	2017
<b>Source:</b>	Opportunity Index using data provided by the U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Bureau of Health Workforce
<b>Relevance:</b>	Household food insecurity is associated with significantly higher rates of emergency department use and school absenteeism, as well as lower access to primary health care. <sup>1</sup>
<b>Affordable Housing</b>	
<b>Definition:</b>	Percentage of households spending less than 30% of their income on housing-related costs
<b>Year:</b>	2013-2017
<b>Source:</b>	Opportunity Index using data provided by the U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates
<b>Relevance:</b>	High housing cost burden is associated with limited access to food among low-income families. Public housing and sufficient cash assistance has been found to alleviate food insecurity. <sup>2</sup>
<b>Breastfeeding</b>	
<b>Definition:</b>	Percentage of mothers who initiated breastfeeding in the hospital after giving birth
<b>Year:</b>	2016
<b>Source:</b>	2020 Family Support Needs Assessment (FSNA) Report using data provided by the Pennsylvania Department of Health (DOH), Bureau of Health Statistics & Registries
<b>Relevance:</b>	Breastfeeding has been found to have profound biological effects and consequences on the health and nutritional outcomes of children. Breastmilk contributes to ensuring children's adequate nutritional status, proper growth, and substantially lowers the risks of morbidity and mortality. <sup>3</sup>
<b>Broadband Internet Subscription</b>	
<b>Definition:</b>	Percentage of households with subscriptions to broadband internet service
<b>Year:</b>	2017-2021



<b>Source:</b>	U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates
<b>Relevance:</b>	Access to broadband internet has become a basic necessity in the modern age, linking people to vital resources, such as housing, food, health care, education, income, and information. <sup>4</sup>
<b>Child Food Insecurity</b>	
<b>Definition:</b>	Percentage of children who live in households that lack consistent access to sufficient food
<b>Year:</b>	2017
<b>Source:</b>	2020 Family Support Needs Assessment using data provided by Feeding America
<b>Relevance:</b>	Child food insecurity is related to many poor health outcomes, including a higher risk of depression, suicidal ideation, and chronic conditions such as asthma. Nutrient deficiencies are also known to impair learning and cause decreased productivity in school-age children. <sup>5</sup>
<b>Child Poverty</b>	
<b>Definition:</b>	Percentage of population under age 18 living below 100%, 200%, and 300% of the federal poverty level
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates. The 27 smallest counties are not included in ACS 1-Year Estimates (Bedford, Bradford, Cameron, Clarion, Clinton, Elk, Forest, Fulton, Greene, Huntingdon, Jefferson, Juniata, McKean, Mifflin, Montour, Perry, Pike, Potter, Snyder, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Wayne, and Wyoming). Data used for these counties are small area (PUMA) figures.
<b>Relevance:</b>	A two-way relationship exists between malnutrition and poverty that inevitably perpetuates each circumstance and creates a vicious cycle that is incredibly difficult to break. Malnutrition produces conditions of poverty by reducing the economic potential of the population, while poverty reinforced malnutrition by increasing the risk of food insecurity. <sup>6</sup>
<b>Childhood Obesity</b>	
<b>Definition:</b>	Percentage of children in kindergarten through grade 6 who are significantly overweight for their age or height
<b>Year:</b>	2018
<b>Source:</b>	U.S. Department of Health and Human Services (HHS), National Institutes of Health (NIH) using data provide by the Pennsylvania Department of Health (DOH)
<b>Relevance:</b>	Child malnutrition, which is a global public health problem associated with high health care cost and increased morbidity and mortality, comes in the form of undernutrition, overweight, and obesity. The childhood obesity rate is therefore an indicator related to children overall nutritional status. <sup>7</sup>
<b>Clinical Care</b>	

<b>Definition:</b>	Combined score (relating to overall county health) based on: population's health insurance coverage, number of healthcare providers, access to preventative healthcare, access to care, and quality of care
<b>Year:</b>	2020-2022
<b>Source:</b>	County Health Rankings using data provided by the U.S. Census Bureau, Small Area Health Insurance Estimates (SAHIE); U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Bureau of Health Workforce, and Centers for Medicare & Medicaid Services (CMS); and American Medicaid Association (AMA)
<b>Relevance:</b>	Food insecurity is associated with decreased access to and quality of care, as well as increased utilization of health care services. This suggests a need for increased screening for food insecurity in health care settings. <sup>8</sup>
<b>Educational Attainment</b>	
<b>Definition:</b>	Percentage of adults with less than a high school education, only a high school diploma / GED, or who have attended some college but never completed a degree
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates. The 27 smallest counties are not included in ACS 1-Year Estimates (Bedford, Bradford, Cameron, Clarion, Clinton, Elk, Forest, Fulton, Greene, Huntingdon, Jefferson, Juniata, McKean, Mifflin, Montour, Perry, Pike, Potter, Snyder, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Wayne, and Wyoming). Data used for these counties are small area (PUMA) figures.
<b>Relevance:</b>	There is a strong inverse association between household food insecurity and educational attainment, indicating that people with low levels of education have an increased likelihood of food insecurity. <sup>9</sup>
<b>Family Type</b>	
<b>Definition:</b>	Percentage of single father and single mother households
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates. The 27 smallest counties are not included in ACS 1-Year Estimates (Bedford, Bradford, Cameron, Clarion, Clinton, Elk, Forest, Fulton, Greene, Huntingdon, Jefferson, Juniata, McKean, Mifflin, Montour, Perry, Pike, Potter, Snyder, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Wayne, and Wyoming). Data used for these counties are small area (PUMA) figures.
<b>Relevance:</b>	Food insecurity is disproportionately higher in single parent-households compared to two-parent households, with it being highest among single mothers and those with incomes below the poverty line. <sup>10</sup>
<b>Food Environment</b>	
<b>Definition:</b>	Combined score (relating to overall county health) based on: population's access to healthy foods by considering distance from a grocery store or

	supermarket, number of locations for health food purchases, and inability to access healthy food because of cost barriers
<b>Year:</b>	2019
<b>Source:</b>	County Health Rankings using data provided by the U.S. Department of Agriculture (USDA)
<b>Relevance:</b>	The food environment is defined as social, economic, and cultural factors that influence dietary behaviors. Food security is determined not only by the basic availability of food, but the food environment in which people live as well. <sup>11</sup>
<b>Food Insecurity of Population</b>	
<b>Definition:</b>	Percentage of population who lacks adequate access to food
<b>Year:</b>	2020
<b>Source:</b>	County Health Rankings using data provided by Feeding America
<b>Relevance:</b>	Household food insecurity, even at marginal levels, is associated with children's behavioral, academic, and emotional problems from infancy to adolescence. <sup>12</sup>
<b>Free or Reduced Price Lunch</b>	
<b>Definition:</b>	Percentage of children eligible for free or reduced price lunch
<b>Year:</b>	2020-2021
<b>Source:</b>	County Health Rankings using data provided by the National Center for Education Statistics (NCES)
<b>Relevance:</b>	Free and reduced price meals ensure that low-income students have equitable access to nutritious food. <sup>13</sup> Analyzing the percent of children eligible for free or reduced price lunch therefore provides insight on the rate of children most at risk for experiencing food insecurity.
<b>Health Insurance Status of Children</b>	
<b>Definition:</b>	Percentage of children with public health insurance or without any health insurance
<b>Year:</b>	2017-2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates
<b>Relevance:</b>	Food insecurity is a well-established social determinant of health. Children in households with food insecurity are more often publicly insured or have no health insurance at all compared to all other children. <sup>14, 15</sup>
<b>Household Characteristics</b>	
<b>Definition:</b>	Combined score (relating to social vulnerability) based on: population ages 65 and older, ages 17 and younger, disability status, single-parent households, and English language proficiency
<b>Year:</b>	2020
<b>Source:</b>	Social Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Agency for Toxic Substances and Diseases (ATSDR)
<b>Relevance:</b>	Children in households with food insecurity were more likely to be poor, and their parents were more likely to be non-English speaking, single, have fair or poor mental health, be unemployed, and lack a high school degree. <sup>16</sup>

Housing Type & Transportation	
<b>Definition:</b>	Combined score (relating to social vulnerability) based on: population living in multi-unit structures, mobile homes, group quarters, over-crowding, and lack of access to a vehicle
<b>Year:</b>	2020
<b>Source:</b>	Social Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Agency for Toxic Substances and Diseases (ATSDR)
<b>Relevance:</b>	Environmental conditions can greatly impact physical access to food. Children living in higher-poverty neighborhoods are more likely to experience food insecurity due to community factors such as transportation, housing costs, and grocery store availability. <sup>17</sup>
Income	
<b>Definition:</b>	Median household income of population age 25 and older
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates. The 27 smallest counties are not included in ACS 1-Year Estimates (Bedford, Bradford, Cameron, Clarion, Clinton, Elk, Forest, Fulton, Greene, Huntingdon, Jefferson, Juniata, McKean, Mifflin, Montour, Perry, Pike, Potter, Snyder, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Wayne, and Wyoming). Data used for these counties are small area (PUMA) figures.
<b>Relevance:</b>	Food insecurity is the most prevalent in low-income areas and has been linked to many socioeconomic factors, such as low wages, limited access to healthy foods, residential segregation, lack of affordable housing, and neighborhood disadvantage. <sup>18</sup>
Income Inequality	
<b>Definition:</b>	Statistical measure of income inequality ranging from 0 to 1 (1 indicates perfect inequality, 0 indicates perfect equality)
<b>Year:</b>	2013-2017
<b>Source:</b>	Opportunity Index using data provided by the U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates
<b>Relevance:</b>	Income inequality increases the likelihood of food insecurity. Individual food insecurity is a complex phenomenon that is not only determined by individual and household's socio-economic characteristics but also by country specific factors that directly shape the extent to which people have access to food. <sup>19</sup>
Labor Force Status	
<b>Definition:</b>	Percentage of parents in the labor force with children birth to age 17
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates. The 27 smallest counties are not included in ACS 1-Year Estimates (Bedford, Bradford, Cameron, Clarion, Clinton, Elk, Forest, Fulton, Greene, Huntingdon, Jefferson, Juniata, McKean,

	Mifflin, Montour, Perry, Pike, Potter, Snyder, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Wayne, and Wyoming). Data used for these counties are small area (PUMA) figures.
<b>Relevance:</b>	High unemployment rates among low-income populations make it more difficult to meet basic household food needs, which is why children with unemployed parents have higher rates of food insecurity than children with employed parents. <sup>20, 21</sup>
<b>Limited Access to Healthy Food</b>	
<b>Definition:</b>	Percentage of population who are low-income and do not live close to a grocery store or supermarket, which traditionally provide healthier options than convenience stores
<b>Year:</b>	2019
<b>Source:</b>	County Health Rankings using data provided by the U.S. Department of Agriculture (USDA)
<b>Relevance:</b>	Food insecurity is the most prevalent in low-income areas and has been linked to many socioeconomic factors, such as low wages, limited access to healthy foods, residential segregation, lack of affordable housing, and neighborhood disadvantage. <sup>22</sup>
<b>Medicaid Births</b>	
<b>Definition:</b>	Percentage of births with principal payment source of Medicaid
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Medicaid plays a key role in providing maternity-related services for pregnant women, paying for approximately half of all births in the United States. <sup>23</sup> Given the association between income and Medicaid eligibility, areas with high rates of Medicaid births can be considered higher risk for food insecurity.
<b>Physical Environment</b>	
<b>Definition:</b>	Combined score (relating to maternal vulnerability) based on: environmental factors in the area that influence maternal health outcomes, including violent crime rates, housing conditions, pollution, and access to transportation
<b>Year:</b>	2021
<b>Source:</b>	Maternal Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Division of Vital Statistics
<b>Relevance:</b>	Environmental conditions can greatly impact physical access to food. Children living in higher-poverty neighborhoods are more likely to experience food insecurity due to community factors such as transportation, housing costs, and grocery store availability. <sup>24</sup>
<b>Public Assistance</b>	
<b>Definition:</b>	Percentage of households with children under 18 years of age who have received SSI, cash assist, or SNAP in the past 12 months
<b>Year:</b>	2013-2017

<b>Source:</b>	2020 Family Support Needs Assessment, U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates
<b>Relevance:</b>	Individuals must be extremely low-income to be eligible for Supplemental Security Income (SSI), cash assistance (TANF), or Supplemental Nutrition Assistance Program (SNAP). <sup>25, 26, 27</sup> High rates of families utilizing public assistance therefore represent an increased risk for economic insecurity relating to food, housing, and other necessities.
<b>Quality of Life</b>	
<b>Definition:</b>	Combined score (relating to overall county health) based on: population's poor physical health, poor mental health, and low birthweight
<b>Year:</b>	2014-2020
<b>Source:</b>	County Health Rankings using data provided by U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveillance System (BRFSS) and National Center for Health Statistics
<b>Relevance:</b>	Nutrition is a critical part of health and development. <sup>28</sup> Poor nutrition can lead to various adverse health effects including obesity, diabetes, and depression, and is among the leading causes of infants being born low birth weight. <sup>29, 30, 31</sup>
<b>Race &amp; Ethnic Minority Status of Children</b>	
<b>Definition:</b>	Percentage of population birth to age 19 that identifies as Hispanic or Latino, Black or African American, American Indian and Alaska native, Native Hawaiian and other Pacific Islander, and two or more races
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, Population and Housing Unit Estimates
<b>Relevance:</b>	Food insecurity continues to be substantially higher for households that are American Indian or Alaska Native, Black, Hispanic, or multiracial compared to households overall, showing stark racial/ethnic inequities. Food insecurity is also more severe for households with children. <sup>32</sup>
<b>Race &amp; Ethnic Minority Status of Population</b>	
<b>Definition:</b>	Percentage of population that identifies as Hispanic or Latino, Black and African American, American Indian and Alaska native, Asian, Native Hawaiian and other Pacific Islander, two or more races, and other races
<b>Year:</b>	2020
<b>Source:</b>	Social Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Agency for Toxic Substances and Diseases (ATSDR)
<b>Relevance:</b>	Food insecurity continues to be substantially higher for households that are American Indian or Alaska Native, Black, Hispanic, or multiracial compared to households overall, showing stark racial/ethnic inequities. <sup>33</sup>
<b>Racial Disparity in WIC Births</b>	
<b>Definition:</b>	Ratio of WIC birth born to black mothers to that of WIC births born to white mothers

<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Black children are more likely to experience food insecurity than children of other races. In fact, in 2022, 1 in three Black children did not have reliable access to food. <sup>34</sup> High ratios of racial disparity in WIC births can therefore indicate high risk for future food insecurity.
<b>SNAP Enrollment</b>	
<b>Definition:</b>	Percentage of children enrolled in supplemental nutrition assistance program (SNAP)
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by Pennsylvania Department of Human Services (DHS), Office of Income Maintenance, Bureau of Program Support
<b>Relevance:</b>	Individuals must be extremely low-income to be eligible for Supplemental Nutrition Assistance Program (SNAP). <sup>35</sup> High rates of families utilizing this public assistance therefore represent an increased risk for economic insecurity relating to food, housing, and other necessities.
<b>SNAP-Authorized Stores</b>	
<b>Definition:</b>	Rate of SNAP-authorized stores (per 1,000 families)
<b>Year:</b>	2012
<b>Source:</b>	2020 Family Support Needs Assessment using data provided by the U.S. Department of Agriculture (USDA)
<b>Relevance:</b>	Access to affordable and nutritious food is incredibly important for the effectiveness of the Supplemental Nutrition Assistance Program (SNAP). Areas without access to healthy food, also known as food deserts, tend to have residents who have lower incomes, lower levels of education, and higher unemployment. <sup>36</sup> Such areas with low rates of SNAP-authorized stores serve as a major barrier to low-income families in their ability to access healthy food.
<b>Social &amp; Economic Factors</b>	
<b>Definition:</b>	Combined score (relating to county health) based on: population's education, employment, income, family and social support, and community safety
<b>Year:</b>	2016-2021
<b>Source:</b>	County Health Rankings using data provided by the U.S. Census Bureau, American Community Survey (ACS), Small Area Health Insurance Estimates (SAHIE) and County Business Patterns (CBP); U.S. Department of Labor, Bureau of Labor Statistics (BLS); and U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics
<b>Relevance:</b>	Food insecurity is the most prevalent in low-income areas and has been linked to many socioeconomic factors, such as low wages, limited access to healthy foods, residential segregation, lack of affordable housing, and neighborhood disadvantage. <sup>37</sup>

Socioeconomic Status	
<b>Definition:</b>	Combined score (relating to social vulnerability) based on: population living below 150% poverty, unemployment rate, housing cost burden, low educational attainment, and lack of health insurance
<b>Year:</b>	2020
<b>Source:</b>	Social Vulnerability Index using data provided by U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Agency for Toxic Substances and Diseases (ATSDR)
<b>Relevance:</b>	Food insecurity is intricately connected with socioeconomic status. High incomes, high educational attainment, and home ownership are all correlated with a low likelihood of food insufficiency. By comparison, those in poverty are over 3.5 times more likely to be food insufficient. <sup>38</sup>
TANF Enrollment	
<b>Definition:</b>	Percentage of children enrolled in temporary assistance for needy families (TANF)
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Department of Human Services (DHS), Office of Income Maintenance, Bureau of Program Support
<b>Relevance:</b>	Individuals must be extremely low-income to be eligible for Temporary Assistance for Needy Families (TANF). <sup>39</sup> High rates of families utilizing cash assistance therefore represent an increased risk for economic insecurity relating to food, housing, and other necessities.
Unemployment	
<b>Definition:</b>	Percentage of population over age 18 not working
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Department of Labor and Industry (L & I), Center for Workforce Information and Analysis
<b>Relevance:</b>	High unemployment rates among low-income populations make it more difficult to meet basic household food needs, which is why children with unemployed parents have higher rates of food insecurity than children with employed parents. <sup>40, 41</sup>
WIC Births	
<b>Definition:</b>	Percentage of births to mothers enrolled in the Special Supplemental Nutrition Program for Women, Infants, & Children (WIC)
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Special Supplemental Nutrition Program for Women, Infants, & Children (WIC) is one of the most extensive nutrition and food programs in the United States. <sup>42</sup> Because WIC is specifically meant to address the nutritional needs of pregnant, postpartum, and breastfeeding individuals, infants, and children, rates of WIC



	births can be used as an indicator of a population’s general risk level when it comes to food insecurity.
<b>WIC Redemptions</b>	
<b>Definition:</b>	Per capita dollar amount of WIC redemptions
<b>Year:</b>	2012
<b>Source:</b>	2020 Family Support Needs Assessment using data provided by the U.S. Department of Agriculture (USDA)
<b>Relevance:</b>	Changes to the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Cash-Value Benefit (CVB) during the COVID-19 Pandemic provided participants with additional money to spend on fruits and vegetables. Higher CVB allotments were shown to increase WIC participants’ purchasing and consumption of fruits and vegetables, increase the frequency of their shopping occasions, and enhance their dietary variety. This suggests that the dollar amount of WIC redemptions is positively correlated to healthy food access and food insecurity. <sup>43</sup>
<b>WIC-Authorized Stores</b>	
<b>Definition:</b>	Rate of WIC-authorized stores (per 1,000 families with children under age 6)
<b>Year:</b>	2012
<b>Source:</b>	2020 Family Support Needs Assessment using data provided by the U.S. Department of Agriculture (USDA)
<b>Relevance:</b>	The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is USDA’s third-largest food assistance program. The program provides supplemental foods, nutrition education, breastfeeding support, and healthcare referrals at no charge to low-income and nutritionally at-risk pregnant and postpartum women, as well as infants and children up to age 5. <sup>44</sup> Areas with low rates of WIC-authorized stores serve as a major barrier to low-income families in their ability to access healthy food.

**MATERNAL HEALTH**

<b>Abuse Against Postpartum &amp; Pregnant Women</b>	
<b>Definition:</b>	Rate (per 100) of diagnosed abuse among Medicaid-enrolled pregnant women or women who gave birth in the past 3 years
<b>Year:</b>	2016
<b>Source:</b>	2020 Family Support Needs Assessment (FSNA) Report using data provided by Pennsylvania Department of Health (DOH), Bureau of Health Statistics & Registries; and Pennsylvania Department of Human Services (DHS), Office of Medical Assistance Programs (OMAP)
<b>Relevance:</b>	Abuse during pregnancy can cause miscarriage and vaginal bleeding, as well as preterm birth, low birth weight, and other injuries to the mother and baby. <sup>45</sup>
<b>Access to Primary Health Care</b>	
<b>Definition:</b>	Rate of primary care physicians (per 100,000 population)
<b>Year:</b>	2017

<b>Source:</b>	Opportunity Index using data provided by the U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Bureau of Health Workforce
<b>Relevance:</b>	Access to primary care physicians significantly improves perinatal health in terms of fewer fetal deaths, increased birth weight, and decreased maternal mortality. <sup>46, 47</sup>
<b>Breastfeeding</b>	
<b>Definition:</b>	Percentage of mothers who initiated breastfeeding in the hospital after giving birth
<b>Year:</b>	2016
<b>Source:</b>	2020 Family Support Needs Assessment (FSNA) Report using data provided by Pennsylvania Department of Health (DOH), Bureau of Health Statistics & Registries
<b>Relevance:</b>	Breastfeeding is associated with positive outcomes related to both maternal and child health. Breast milk provides babies with nutrition that supports ideal growth and development and lowers their risks of asthma, type 1 diabetes, sudden infant death syndrome (SIDS), and other illnesses and diseases by sharing antibodies that help prosper strong immune systems. Breastfeeding can also reduce mother's risk of breast and ovarian cancer, type 2 diabetes, and high blood pressure. <sup>48</sup>
<b>Broadband Internet Subscription</b>	
<b>Definition:</b>	Percentage of households with subscriptions to broadband internet service
<b>Year:</b>	2017-2021
<b>Source:</b>	U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates
<b>Relevance:</b>	Internet access significantly facilitates health care access in addition to mitigating the negative impact of income inequality on health care access. <sup>49</sup>
<b>Child Poverty</b>	
<b>Definition:</b>	Percentage of population under age 18 living below 100%, 200%, and 300% of the federal poverty level
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates. The 27 smallest counties are not included in ACS 1-Year Estimates (Bedford, Bradford, Cameron, Clarion, Clinton, Elk, Forest, Fulton, Greene, Huntingdon, Jefferson, Juniata, McKean, Mifflin, Montour, Perry, Pike, Potter, Snyder, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Wayne, and Wyoming). Data used for these counties are small area (PUMA) figures.
<b>Relevance:</b>	Poverty is associated with decreased utilization of appropriate prenatal care and delivery services as well as increased risk of obesity, hypertension, diabetes, chronic stress, depression, and substance use. These risk factors put women living in poverty at an increased likelihood of experiencing poor maternal health and birth outcomes such as preeclampsia and preterm birth. <sup>50</sup>
<b>Clinical Care</b>	

<b>Definition:</b>	Combined score (relating to overall county health) based on: population's health insurance coverage, number of healthcare providers, access to preventative healthcare, access to care, and quality of care
<b>Year:</b>	2020-2022
<b>Source:</b>	County Health Rankings using data provided by the U.S. Census Bureau, Small Area Health Insurance Estimates (SAHIE); U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Bureau of Health Workforce, and Centers for Medicare & Medicaid Services (CMS); and American Medicaid Association (AMA)
<b>Relevance:</b>	Health system components such as financial barriers to care, a shortage of primary care providers, and important gaps in quality of care play a key role in maternal health outcomes in the United States. <sup>51</sup>

**General Healthcare**

<b>Definition:</b>	Combined score (relating to maternal vulnerability) based on: accessibility, affordability, and utilization of health care of the population, including insurance coverage and state Medicaid expansion status
<b>Year:</b>	2021
<b>Source:</b>	Maternal Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Division of Vital Statistics
<b>Relevance:</b>	Ensuring access to affordable and comprehensive health care across a woman's life course is critically important to assuring optimal maternal health outcomes if and when she chooses to reproduce. <sup>52</sup>

**Health Behaviors**

<b>Definition:</b>	Combined score (relating to overall county health) based on: population's tobacco use, diet and exercise, alcohol and drug use, and sexual activity
<b>Year:</b>	2014-2022
<b>Source:</b>	County Health Rankings using data provided by the U.S. Census Bureau; U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveillance System (BRFSS), National Center for Health Statistics and National Center for HIV, Viral Hepatitis, STD, and TB Prevention; U.S. Department of Agriculture (USDA); Feeding America; and U.S. Department of Transportation, Fatality Analysis Reporting System (FARS)
<b>Relevance:</b>	Health behaviors such as appropriate nutrition, adequate physical activity, vitamin intake, regular perinatal care, and health care utilization are essential for healthy pregnancies. Poor physical health can otherwise lead to a wide range of adverse effects on maternal and child health, including preterm labor, obesity and overweight status of the mother, low birth weight of the baby, preeclampsia, hypertension, miscarriage, stillbirth, and emergency cesarean delivery. <sup>53</sup>

**Health Insurance Status of Population**

<b>Definition:</b>	Percentage of the population (under age 65) without health insurance coverage
<b>Year:</b>	2013-2017
<b>Source:</b>	Opportunity Index using data provided by the U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates
<b>Relevance:</b>	In the United States, women who lack health insurance are three to four times more likely to die from pregnancy-related complications than their insured counterparts. <sup>54</sup>
<b>Housing Type &amp; Transportation</b>	
<b>Definition:</b>	Combined score (relating to social vulnerability) based on: population living in multi-unit structures, mobile homes, group quarters, over-crowding, and lack of access to a vehicle
<b>Year:</b>	2020
<b>Source:</b>	Social Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Agency for Toxic Substances and Diseases (ATSDR)
<b>Relevance:</b>	Housing conditions and neighborhood quality play a profound role in affecting infant and maternal health outcomes. <sup>55</sup> Inaccessibility to private transportation and difficult transportation methods are also potential barriers to adequate prenatal care. <sup>56</sup>
<b>Income</b>	
<b>Definition:</b>	Median household income of population age 25 and older
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates. The 27 smallest counties are not included in ACS 1-Year Estimates (Bedford, Bradford, Cameron, Clarion, Clinton, Elk, Forest, Fulton, Greene, Huntingdon, Jefferson, Juniata, McKean, Mifflin, Montour, Perry, Pike, Potter, Snyder, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Wayne, and Wyoming). Data used for these counties are small area (PUMA) figures.
<b>Relevance:</b>	Low-income mothers tend to show higher rates of abortion, Cesarean delivery, preeclampsia, preterm delivery, and obstetric hemorrhage than their higher earning peers. <sup>57</sup>
<b>Income Inequality</b>	
<b>Definition:</b>	Statistical measure of income inequality ranging from 0 to 1 (1 indicates perfect inequality, 0 indicates perfect equality)
<b>Year:</b>	2013-2017
<b>Source:</b>	Opportunity Index using data provided by the U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates
<b>Relevance:</b>	Income inequality plays a significant role in explaining disparities in maternal health and birth outcomes. Women from lower levels of occupation/social classes are more likely than their higher-ranking peers to experience stillbirth, neonatal mortality, perinatal mortality, preterm birth, and low birth weight. <sup>58</sup>
<b>Infant Mortality</b>	

<b>Definition:</b>	Percentage of deaths of babies less than 28 days old
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Maternal and infant mortality rates in the U.S. are far higher than those in similarly large and wealthy countries, and people of color are at increased risk for poor maternal and infant health outcomes compared to their White peers. The primary causes of infant mortality are birth defects, preterm birth and low birth weight, and maternal pregnancy complications. <sup>59</sup>
<b>Low Birth Weight</b>	
<b>Definition:</b>	Percentage of births weighing less than 2,500 grams
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Low birth weight (LBW) often results from preterm birth, intrauterine growth restriction, or a combination of the two. LBW not only reflects the malnutrition and poor health status of the mother, but also predicts future information about the survival, development, and long-term health of the baby. <sup>60</sup>
<b>Maternal Depression</b>	
<b>Definition:</b>	Rate (per 100) of diagnosed depression among Medicaid-enrolled women who were pregnant or gave birth in the past 3 years
<b>Year:</b>	2016
<b>Source:</b>	2020 Family Support Needs Assessment (FSNA) Report using data provided by Pennsylvania Department of Human Services Office of Medical Assistance Programs, Medicaid Claims, Birth Certificate Records; and Pennsylvania Department of Health, Bureau of Health Statistics and Research
<b>Relevance:</b>	Maternal depression has significant negative impacts on mothers' psychological health, quality of life, and interactions with their infant, partner, and relatives. The accumulation of these elements creates an environment that is not conducive of optimal child development. <sup>61</sup>
<b>Maternal Tobacco Use</b>	
<b>Definition:</b>	Rate (per 100) of births to mothers who used tobacco during pregnancy
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center Using data provided by the Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Smoking during pregnancy increases the likelihood of preterm labor, ectopic pregnancy, vaginal bleeding, and problems related to the placenta such as placental abruption and placenta previa. It can also cause babies to be born prematurely, have birth defects like a cleft lip, have low birth weight, or even die before birth from miscarriage or stillbirth. <sup>62</sup>
<b>Maternal Vulnerability</b>	

<b>Definition:</b>	Combined score based on: outcomes related to reproductive healthcare, physical health, mental health & substance use, general healthcare, socioeconomic determinants, and the physical environment
<b>Year:</b>	2021
<b>Source:</b>	Maternal Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Division of Vital Statistics
<b>Relevance:</b>	Maternal vulnerability, characterized by 43 composite measures related to socioeconomic status, health and access to healthcare, and other environmental factors that effect maternal health outcomes, is found to be positively associated with the likelihood of preterm birth. <sup>63</sup>
<b>Maternity Care Desert</b>	
<b>Definition:</b>	Any county without a hospital or birth center offering obstetric care and without any obstetric providers (1 = Access to Maternity Care, 2 = Moderate Access to Care, 3 = Maternity Care Desert)
<b>Year:</b>	2020
<b>Source:</b>	March of Dimes, PeriStats using data provided by the U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA)
<b>Relevance:</b>	Maternity care deserts are associated with low access to appropriate preventive, prenatal, and postpartum care, which can lead to inadequacies in care and an increased risk of maternal morbidity and mortality. <sup>64</sup>
<b>Medicaid Births</b>	
<b>Definition:</b>	Rate (per 100) of births with principal payment source of Medicaid
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Compared to women with private insurance, those on Medicaid have been shown to be a high-risk group for adverse birth outcomes due to increased likelihood of smoking, illicit drug use, and late enrollment into prenatal care. <sup>65</sup>
<b>Mental Health &amp; Substance Abuse</b>	
<b>Definition:</b>	Combined score (relating to maternal vulnerability) based on: factors related to population rates of stress, mental illness, and addiction
<b>Year:</b>	2021
<b>Source:</b>	Maternal Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Division of Vital Statistics
<b>Relevance:</b>	Poor maternal mental health is a risk factor for preterm birth and low birth weight in offspring. <sup>66</sup>
<b>Mental Health Providers</b>	
<b>Definition:</b>	Ratio of population to every one mental health provider
<b>Year:</b>	2022

<b>Source:</b>	County Health Rankings using data provided by the U.S. Centers for Medicare & Medicaid Services, National Provider Identifier (NPI)
<b>Relevance:</b>	Access to mental health services plays an essential role in perinatal health during and after pregnancy. Pregnant women experiencing depression or anxiety are more likely to have gestational hypertension and hemorrhaging, preterm birth, low birth weight, and having babies who are small for their gestational age. Untreated postpartum depression is also associated with poor child developmental outcomes and increased risk of suicide, a leading cause of maternal mortality in the United States. <sup>67</sup>
<b>Mother's Education</b>	
<b>Definition:</b>	Percentage of births to mothers with less than a high school degree
<b>Year:</b>	2019
<b>Source:</b>	Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Women who lack a basic education have almost three times higher the risk of maternal mortality than women who have graduated from high school. <sup>68</sup>
<b>Physical Environment</b>	
<b>Definition:</b>	Combined score (relating to maternal vulnerability) based on: environmental factors in the area that influence maternal health outcomes, including violent crime rates, housing conditions, pollution, and access to transportation
<b>Year:</b>	2021
<b>Source:</b>	Maternal Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Division of Vital Statistics
<b>Relevance:</b>	Prenatal exposure to poor housing conditions and pollution has significant direct and indirect effects on the risk of adverse birth outcomes, including increased probability of being small for gestational age, preterm birth, and low birth weight. <sup>69</sup> Living in a community with high rates of crime is also associated with heightened perceived stress during pregnancy, which can lead to increased likelihood of preterm birth as well as maternal morbidity and mortality. <sup>70</sup>
<b>Physical Health</b>	
<b>Definition:</b>	Combined score (relating to maternal vulnerability) based on: population prevalence of noncommunicable diseases and sexually transmitted infections
<b>Year:</b>	2021
<b>Source:</b>	Maternal Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Division of Vital Statistics
<b>Relevance:</b>	Having a sexually transmitted infection, also known as an STI, during pregnancy can cause premature labor, which is the number one cause of infant death and can lead to long-term developmental and health problems in children. STIs can also cause infection in the uterus after birth. <sup>71</sup>
<b>Postpartum High-Risk Opioid Use</b>	
<b>Definition:</b>	Rate (per 100) of mothers receiving 2 or more opioid prescriptions among Medicaid-enrolled mothers who delivered live births in the past 2 years

<b>Year:</b>	2017
<b>Source:</b>	2020 Family Support Needs Assessment (FSNA) Report using data provided by Pennsylvania Department of Human Services Office of Medical Assistance Programs, Medicaid Claims; and Pennsylvania Department of Health, Bureau of Health Statistics and Research, Birth Certificate Records
<b>Relevance:</b>	Prescription opioids are commonly used prenatally for the management of pain, despite being associated with poor fetal growth, preterm birth, birth defects, and neonatal abstinence syndrome. <sup>72</sup>
<b>Pregnancy &amp; Postpartum Substance Use Disorder</b>	
<b>Definition:</b>	Rate (per 100) of substance use disorder among Medicaid-enrolled mothers who were pregnant or delivered live births in the past 3 years
<b>Year:</b>	2016
<b>Source:</b>	2020 Family Support Needs Assessment (FSNA) Report using data provided by Pennsylvania Department of Human Services Office of Medical Assistance Programs, Medicaid Claims; and Pennsylvania Department of Health, Bureau of Health Statistics and Research, Birth Certificate Records
<b>Relevance:</b>	Substance use during pregnancy has been linked to a wide range of detrimental effects, including increased risks of miscarriage, stillbirth and infant mortality, congenital anomalies, low birth weight, reduced gestational age, preterm delivery, and small for gestational age. There is also increased likelihood of long-term adverse fetal outcomes related to cognitive, motor, language, and psychosocial development that can lead to reduced attention and executive functioning skills, poor academic achievement, and behavioral problems. <sup>73</sup>
<b>Prenatal Care</b>	
<b>Definition:</b>	Rate (per 100) of mothers receiving prenatal care in the 1st trimester
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Prenatal care is most effective when it starts early and continues throughout the entire pregnancy and can help prevent and address health problems in both mothers and babies. <sup>74</sup> Poor prenatal care utilization due to late onset of care, low frequency of care visits, or combinations of the two significantly increases the risks of maternal insufficient gestational weight gain, prenatal smoking, premature ruptured membranes, precipitous labor, no breastfeeding, postnatal underweight, and postpartum smoking. <sup>75</sup>
<b>Preterm Births</b>	
<b>Definition:</b>	Rate (per 100) of live births born before 37 weeks of pregnancy
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Preterm delivery is among the most common adverse birth outcomes caused by maternal risk factors. Not only is preterm birth indicative of poor maternal health, but it is significantly associated with maternal morbidity and mortality. <sup>76</sup>



Public Assistance	
<b>Definition:</b>	Percentage of households with children under 18 years of age who have received SSI, cash assist, or SNAP in the past 12 months
<b>Year:</b>	2013-2017
<b>Source:</b>	2020 Family Support Needs Assessment, U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates
<b>Relevance:</b>	Income assistance is linked with healthier birth weights, lower maternal stress, better childhood nutrition, higher school enrollment, higher test scores, higher high school graduation rates, and higher rates of college entry. <sup>77</sup>
Quality of Life	
<b>Definition:</b>	Combined score (relating to overall county health) based on: population's poor physical health, poor mental health, and low birthweight
<b>Year:</b>	2014-2020
<b>Source:</b>	County Health Rankings using data provided by U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveillance System (BRFSS) and National Center for Health Statistics
<b>Relevance:</b>	Poor maternal mental health is a risk factor for preterm birth and low birth weight, which not only reflects the overall poor health status of the mother, but also predicts future information about the survival, development, and long-term health of the baby. <sup>78, 79</sup>
Racial & Ethnic Minority Status of Children	
<b>Definition:</b>	Percentage of population birth to age 19 that identifies as Hispanic or Latino, Black or African American, American Indian and Alaska native, Native Hawaiian and other Pacific Islander, and two or more races
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, Population and Housing Unit Estimates
<b>Relevance:</b>	The prevalence of preterm birth, fetal growth restriction, fetal demise, maternal mortality, and inadequate receipt of prenatal care all vary by race/ethnicity. These differences in maternal health and birth outcomes are rooted in varying maternal health behaviors, genetics, and physical and social environments, as well as variability in access and quality of health care. <sup>80</sup>
Racial & Ethnic Minority Status of Population	
<b>Definition:</b>	Percentage of population that identifies as Hispanic or Latino, Black and African American, American Indian and Alaska native, Asian, Native Hawaiian and other Pacific Islander, two or more races, and other races
<b>Year:</b>	2020
<b>Source:</b>	Social Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Agency for Toxic Substances and Diseases (ATSDR)
<b>Relevance:</b>	In the United States, racial and ethnic minority's experience maternal morbidity and mortality ratios several times higher than non-minorities. Such racial

disparities in maternal health outcomes were created by an array of historical, systemic, structural, and political forces. The very structure of American society has led characteristics like education, income, neighborhood demographic, housing, access to care, safety, and food stability to be social determinants of maternal health.<sup>81</sup>

**Racial Disparity in Low Birth Weight**

**Definition:** Ratio of low birth weight in births born to Black mothers to that in births born to White mothers

**Year:** 2020

**Source:** KIDS COUNT Data Center using data provided by Pennsylvania Department of Health (DOH), Division of Health Informatics

**Relevance:** Non-Hispanic (NH) Black mothers are nearly twice as likely as NH White mothers to give birth to a low birth weight baby. This disparity is largely caused by social determinants of health (the justice system, physical and social environment, income and wealth, housing, transportation, and education) that exist within a health care system reinforced by institutional racism.<sup>82</sup>

**Racial Disparity in Prenatal Care**

**Definition:** Ratio of Black mothers receiving prenatal care in the 1st trimester to that of White mothers

**Year:** 2020

**Source:** KIDS COUNT Data Center using data provided by Pennsylvania Department of Health (DOH), Division of Health Informatics

**Relevance:** Seeking early prenatal care is associated with better health outcomes for women and infants, however, notable disparities in prenatal care access persist among U.S. women, particularly among younger, less educated, geographically isolated, and racial/ethnic-minority maternal populations.<sup>83</sup>

**Racial Disparity in Preterm Births**

**Definition:** Ratio of preterm births born to Black mothers to that born to White mothers

**Year:** 2020

**Source:** KIDS COUNT Data Center using data provided by Pennsylvania Department of Health (DOH), Division of Health Informatics

**Relevance:** Persistent Black-White disparity in the prevalence of preterm birth is a complex issue with many different components. While genetic factors combined with maternal stress are thought to play a small role, racism is the only factor that directly and indirectly explains such disparities in preterm birth outcomes. Historical and contemporary systemic racism leads to unequitable socioeconomic opportunities that differentially expose African Americans to lifelong financial stress and associated health-harming conditions.<sup>84</sup>

**Racial Disparity in WIC Births**

**Definition:** Ratio of births born to Black mothers enrolled in Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to that of births born to White mothers enrolled in WIC

**Year:** 2020

<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Black women in the United States disproportionately experience adverse pregnancy outcomes. In fact, in 2023, Black women had a maternal mortality rate almost 3 times higher than that of White women. <sup>85</sup> Low-income mothers also tend to show higher rates of poor pregnancy outcomes, including preeclampsia, preterm birth, and obstetric hemorrhage than their higher earning peers. <sup>86</sup> Since WIC is a nutritional assistance program for low-income women and children, high ratios of racial disparity in WIC births can indicate high risk for future poor maternal health outcomes.
<b>Reproductive Healthcare</b>	
<b>Definition:</b>	Combined score (relating to maternal vulnerability) based on: population's access to family planning and reproductive services, including the availability of skilled attendants
<b>Year:</b>	2021
<b>Source:</b>	Maternal Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Division of Vital Statistics
<b>Relevance:</b>	Restricted access to family planning and reproductive health services, largely caused by social and structural factors, have been found to play a significant role in rising maternal mortality rates. <sup>87</sup>
<b>Single Mothers</b>	
<b>Definition:</b>	Percentage of single mother households
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates. The 27 smallest counties are not included in ACS 1-Year Estimates (Bedford, Bradford, Cameron, Clarion, Clinton, Elk, Forest, Fulton, Greene, Huntingdon, Jefferson, Juniata, McKean, Mifflin, Montour, Perry, Pike, Potter, Snyder, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Wayne, and Wyoming). Data used for these counties are small area (PUMA) figures.
<b>Relevance:</b>	Single motherhood is linked to reduced income, a high risk of poverty, worse maternal mental health, poor parenting practices, and a range of other disruptions, such as home and school moves and multiple family transitions. <sup>88</sup>
<b>SNAP Enrollment</b>	
<b>Definition:</b>	Percentage of children enrolled in supplemental nutrition assistance program (SNAP)
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by Pennsylvania Department of Human Services (DHS), Office of Income Maintenance, Bureau of Program Support
<b>Relevance:</b>	Individuals must be extremely low-income to be eligible for Supplemental Nutrition Assistance Program (SNAP). Because low socioeconomic status (SES)

	can increase the risk of adverse pregnancy outcomes, high rates of families utilizing SNAP represent an increased risk for poor maternal health. <sup>89</sup>
<b>SNAP-Authorized Stores</b>	
<b>Definition:</b>	Number of stores (per 1,000 families) authorized to accept Supplemental Nutrition Assistance Program (SNAP)
<b>Year:</b>	2012
<b>Source:</b>	2020 Family Support Needs Assessment (FSNA) Report using data provided by the United States Department of Agriculture (USDA)
<b>Relevance:</b>	Mothers with access to SNAP during pregnancy have fewer adverse birth outcomes, such as babies born with low birth weight, and have a decreased likelihood of experiencing depressive symptoms. <sup>90</sup>
<b>Social &amp; Economic Factors</b>	
<b>Definition:</b>	Combined score (relating to overall county health) based on: population's education, employment, income, family and social support, and community safety
<b>Year:</b>	2016-2021
<b>Source:</b>	County Health Rankings using data provided by the U.S. Census Bureau, American Community Survey (ACS), Small Area Health Insurance Estimates (SAHIE) and County Business Patterns (CBP); U.S. Department of Labor, Bureau of Labor Statistics (BLS); and U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics
<b>Relevance:</b>	Increased maternal and infant mortality has been linked to various social and economic factors, including income, education, food stability, public safety, access to care, housing, and neighborhood demographics. <sup>91</sup>
<b>Socioeconomic Determinants</b>	
<b>Definition:</b>	Combined score (relating to maternal health) based on: educational attainment, poverty, food insecurity, and social support of the population
<b>Year:</b>	2021
<b>Source:</b>	Maternal Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Division of Vital Statistics
<b>Relevance:</b>	Maternal health outcomes are profoundly influenced by socioeconomic determinants, largely caused by disparities in access to healthcare, influenced by income, education, employment, and housing conditions. These socioeconomic factors pose significant challenges to achieving equitable care for pregnant women worldwide. <sup>92</sup>
<b>Socioeconomic Status</b>	
<b>Definition:</b>	Combined score (relating to social vulnerability) based on: population living below 150% poverty, unemployment rate, housing cost burden, low educational attainment, and lack of health insurance
<b>Year:</b>	2020

<b>Source:</b>	Social Vulnerability Index using data provided by U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Agency for Toxic Substances and Diseases (ATSDR)
<b>Relevance:</b>	Increased maternal and infant mortality has been linked to various social and economic factors, including income, education, food stability, public safety, access to care, housing, and neighborhood demographics. <sup>93</sup>
<b>TANF Enrollment</b>	
<b>Definition:</b>	Percentage of children enrolled in temporary assistance for needy families (TANF)
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Department of Human Services (DHS), Office of Income Maintenance, Bureau of Program Support
<b>Relevance:</b>	Individuals must be extremely low-income to be eligible for Temporary Assistance for Needy Families (TANF). <sup>94</sup> Because low socioeconomic status (SES) can increase the risk of adverse pregnancy outcomes, high rates of families utilizing TANF represent an increased risk for poor maternal health. <sup>95</sup>
<b>Unemployment</b>	
<b>Definition:</b>	Percentage of population over age 18 not working
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Department of Labor and Industry (L & I), Center for Workforce Information and Analysis
<b>Relevance:</b>	Unemployment reduces household incomes, which generates financial strain and hinders access to nutritious food, good housing conditions, and safe neighborhoods. This in turn increases the likelihood of experiencing social and behavioral risk factors for adverse birth outcomes, such as exposure to unsafe environments, amplified stress, and engagement in harmful behaviors, such as smoking or drinking. <sup>96</sup>
<b>WIC Births</b>	
<b>Definition:</b>	Percentage of births to mothers enrolled in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Special Supplemental Nutrition Program for Women, Infants, & Children (WIC) is one of the most extensive nutrition and food programs in the United States. <sup>97</sup> WIC is specifically meant to address the nutritional needs of low-income pregnant, postpartum, and breastfeeding individuals, infants, and children. Because low-income mothers tend to show higher rates of poor pregnancy outcomes, rates of WIC births can be used as an indicator of a population's general risk for future poor maternal health outcomes. <sup>98</sup>
<b>WIC Redemptions</b>	
<b>Definition:</b>	Per capita dollar amount of WIC redemptions

<b>Year:</b>	2012
<b>Source:</b>	2020 Family Support Needs Assessment using data provided by the U.S. Department of Agriculture (USDA)
<b>Relevance:</b>	Changes to the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Cash-Value Benefit (CVB) during the COVID-19 Pandemic provided participants with additional money to spend on fruits and vegetables. Higher CVB allotments were shown to increase WIC participants' purchasing and consumption of fruits and vegetables, increase the frequency of their shopping occasions, and enhance their dietary variety. This suggests that the dollar amount of WIC redemptions is positively correlated to healthy food access and food insecurity, which is a determinant of maternal health. <sup>99</sup>
<b>WIC-Authorized Stores</b>	
<b>Definition:</b>	Number of stores (per 1,000 families with children under age 6) authorized to accept of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)
<b>Year:</b>	2012
<b>Source:</b>	2020 Family Support Needs Assessment (FSNA) Report using data provided by the United States Department of Agriculture (USDA)
<b>Relevance:</b>	WIC provides supplemental foods, nutrition education, breastfeeding support, and healthcare referrals at no charge to low-income and nutritionally at-risk pregnant and postpartum women, as well as infants and children up to age 5. <sup>100</sup> Areas with low rates of WIC-authorized stores serve as a major barrier to low-income families in their ability to access healthy food, which is a determinant of maternal health.
<b>Young Mothers</b>	
<b>Definition:</b>	Percentage of births to mothers under age 21
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Teenage pregnancy is associated with a higher risk of socioeconomic disadvantage, mental health problems, and substance use during pregnancy, which can indirectly lead to adverse birth outcomes. <sup>101</sup>

## EARLY INTERVENTION

<b>Access to Primary Health Care</b>	
<b>Definition:</b>	Rate of primary care physicians (per 100,000 population)
<b>Year:</b>	2017
<b>Source:</b>	Opportunity Index using data provided by the U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Bureau of Health Workforce
<b>Relevance:</b>	Access to healthcare is critical for early intervention participation, as the majority of EI referrals come from medical professionals. <sup>102</sup>
<b>Breastfeeding</b>	

<b>Definition:</b>	Percentage of mothers who initiated breastfeeding in the hospital after giving birth
<b>Year:</b>	2016
<b>Source:</b>	2020 Family Support Needs Assessment (FSNA) Report using data provided by the Pennsylvania Department of Health (DOH), Bureau of Health Statistics & Registries
<b>Relevance:</b>	Breastfeeding has been associated with increased mastery of developmental milestones. Research has found that infants who had never been breastfed are 50% more likely to have gross motor coordination delays than infants who were breastfed exclusively for at least 4 months. <sup>103</sup>

**Broadband Internet Subscription**

<b>Definition:</b>	Percentage of households with subscriptions to broadband internet service
<b>Year:</b>	2017-2021
<b>Source:</b>	U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates
<b>Relevance:</b>	Internet access significantly facilitates health care access in addition to mitigating the negative impact of income inequality on health care access. <sup>104</sup> Access to healthcare is critical for early intervention participation, as the majority of EI referrals come from medical professionals. <sup>105</sup>

**Child Care Subsidy**

<b>Definition:</b>	Percentage of children eligible for child care subsidy but unserved
<b>Year:</b>	2022
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Departments of Education (PDE) and Human Services (DHS), Office of Child Development and Early Learning (OCDEL)
<b>Relevance:</b>	Early child care providers play an incredibly important role throughout the EI process as advocates and information sources for families from time of referral and service provision all the way up to the transition to kindergarten. <sup>106</sup>

**Child Poverty**

<b>Definition:</b>	Percentage of population under age 18 living below 100%, 200%, and 300% of the federal poverty level
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates. The 27 smallest counties are not included in ACS 1-Year Estimates (Bedford, Bradford, Cameron, Clarion, Clinton, Elk, Forest, Fulton, Greene, Huntingdon, Jefferson, Juniata, McKean, Mifflin, Montour, Perry, Pike, Potter, Snyder, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Wayne, and Wyoming). Data used for these counties are small area (PUMA) figures.
<b>Relevance:</b>	Socioeconomic disparities in child development and school readiness emerge as early as the first year of life and persist and worsen over time. Such early disparities lead to reduced readiness to learn upon school entry, and contribute to long-term reductions in academic achievement, educational attainment, and overall well-being. <sup>107</sup> Areas with high rates of child poverty are therefore at a

	heightened need for early intervention services, which have been found to mitigate the negative effects caused by economic hardship during childhood. <sup>108</sup>
<b>Children with Disabilities</b>	
<b>Definition:</b>	Percentage of children diagnosed with a disability ages birth to 18
<b>Year:</b>	2019-2023
<b>Source:</b>	U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates
<b>Relevance:</b>	Early intervention describes the services and supports that are available to babies and young children with developmental delays and disabilities and their families. Such supports may include speech therapy, physical therapy, and other types of services based on the needs of the child and family. Looking at the population's children with disabilities is a way to measure general need for EI. <sup>109</sup>
<b>Clinical Care</b>	
<b>Definition:</b>	Combined score (relating to overall county health) based on: population's health insurance coverage, number of healthcare providers, access to preventative healthcare, access to care, and quality of care
<b>Year:</b>	2020-2022
<b>Source:</b>	County Health Rankings using data provided by the U.S. Census Bureau, Small Area Health Insurance Estimates (SAHIE); U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Bureau of Health Workforce, and Centers for Medicare & Medicaid Services (CMS); and American Medicaid Association (AMA)
<b>Relevance:</b>	Access to healthcare is critical for early intervention participation, as the majority of EI referrals come from medical professionals. <sup>110</sup>
<b>Early Intervention (PART C) Enrollment</b>	
<b>Definition:</b>	Percentage of infants & toddlers enrolled in (PART C) Early Intervention
<b>Year:</b>	2019-2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Departments of Education (PDE) and Human Services (DHS), Office of Child Development and Early Learning (OCDEL)
<b>Relevance:</b>	Part C Early Intervention is a nationwide program that serves infants and toddlers who have developmental delays. Previous research has revealed that large numbers of candidates for Part C services do not receive early intervention, meaning regions with low rates of participation likely represent an increased need for services. <sup>111</sup>
<b>Educational Attainment</b>	
<b>Definition:</b>	Percentage of adults with less than a high school education, only a high school diploma / GED, or who have attended some college but never completed a degree
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates. The 27 smallest counties are not included in ACS 1-Year Estimates (Bedford, Bradford, Cameron, Clarion, Clinton, Elk, Forest, Fulton, Greene, Huntingdon, Jefferson, Juniata, McKean,



	Mifflin, Montour, Perry, Pike, Potter, Snyder, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Wayne, and Wyoming). Data used for these counties are small area (PUMA) figures.
<b>Relevance:</b>	Parent educational attainment provides a foundation that supports children’s academic success indirectly through parents’ beliefs about and expectations for their children, as well as through the cognitive stimulation that parents provide in and outside of the home environment. <sup>112</sup> This suggests low parental educational attainment is linked to an increased risk of developmental delays.
<b>Family Type</b>	
<b>Definition:</b>	Percentage of single father and single mother households
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates. The 27 smallest counties are not included in ACS 1-Year Estimates (Bedford, Bradford, Cameron, Clarion, Clinton, Elk, Forest, Fulton, Greene, Huntingdon, Jefferson, Juniata, McKean, Mifflin, Montour, Perry, Pike, Potter, Snyder, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Wayne, and Wyoming). Data used for these counties are small area (PUMA) figures.
<b>Relevance:</b>	Due to various factors, such as lower socioeconomic status and higher parenting-related stress, children who live in single-parent families are more likely to develop developmental delays. <sup>113</sup>
<b>Health Insurance Status of Children</b>	
<b>Definition:</b>	Percentage of children with public health insurance or without any health insurance
<b>Year:</b>	2017-2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates
<b>Relevance:</b>	Children's access to health care can influence their physical and emotional health, growth, and development and their capacity to reach their full potential as adults. All children are at increased risk of developing preventable conditions if appropriate care is not provided when they are sick or injured. <sup>114</sup>
<b>High-Quality Early Childhood Education</b>	
<b>Definition:</b>	Percentage of children eligible for publicly-funded high-quality pre-k but unserved
<b>Year:</b>	2020-2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Head Start Association; Pennsylvania Departments of Education (PDE) and Human Services (DHS), Office of Child Development and Early Learning (OCDEL); and the U.S. Census Bureau American Community Survey (ACS)
<b>Relevance:</b>	Access to high-quality early childhood education, characterized by responsive teachers and environments, has been linked to improved performance for social and emotional development among children. <sup>115</sup>
<b>Household Characteristics</b>	

<b>Definition:</b>	Combined score (relating to social vulnerability) based on: population ages 65 and older, ages 17 and younger, disability status, single-parent households, and English language proficiency
<b>Year:</b>	2020
<b>Source:</b>	Social Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Agency for Toxic Substances and Diseases (ATSDR)
<b>Relevance:</b>	Various household characteristics have been found to serve as risk factors for early child development. <sup>116</sup> Children with disabled parents are more likely to have disabilities themselves. <sup>117</sup> Due to various factors, such as lower socioeconomic status and higher parenting-related stress, children who live in single-parent families are more likely to develop developmental delays. <sup>118</sup> Among those whose home language is not English, acquiring English proficiency by kindergarten entry is also associated with better cognitive and behavioral developmental outcomes. <sup>119</sup>

**Housing Type & Transportation**

<b>Definition:</b>	Combined score (relating to social vulnerability) based on: population living in multi-unit structures, mobile homes, group quarters, over-crowding, and lack of access to a vehicle
<b>Year:</b>	2020
<b>Source:</b>	Social Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Agency for Toxic Substances and Diseases (ATSDR)
<b>Relevance:</b>	Housing attributes related to quality, crowding, and homeownership are associated with children’s health, development, and academic outcomes. <sup>120</sup> Access to and quality of transportation has also been found to affect the extent to which pregnant women, babies, and toddlers can access the services they need for healthy development. <sup>121</sup>

**Income**

<b>Definition:</b>	Median household income of population age 25 and older
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates. The 27 smallest counties are not included in ACS 1-Year Estimates (Bedford, Bradford, Cameron, Clarion, Clinton, Elk, Forest, Fulton, Greene, Huntingdon, Jefferson, Juniata, McKean, Mifflin, Montour, Perry, Pike, Potter, Snyder, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Wayne, and Wyoming). Data used for these counties are small area (PUMA) figures.
<b>Relevance:</b>	Children living in areas with lower median incomes are less likely to receive Early Intervention services. <sup>122</sup> It has also been found that babies from non-low-income backgrounds are 26% more likely to have a developmental screening than babies from low-income backgrounds. <sup>123</sup>

**Income Inequality**

<b>Definition:</b>	Statistical measure of income inequality ranging from 0 to 1 (1 indicates perfect inequality, 0 indicates perfect equality)
<b>Year:</b>	2013-2017
<b>Source:</b>	Opportunity Index using data provided by the U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates
<b>Relevance:</b>	Income inequality has been negatively linked to economic mobility as well as child development. More specifically, socioeconomic status influences a child's health and aptitudes in the early years, which in turn influences early cognitive and social development, and readiness to learn. <sup>124</sup>

**Labor Force Status**

<b>Definition:</b>	Percentage of parents in the labor force with children birth to age 17
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates. The 27 smallest counties are not included in ACS 1-Year Estimates (Bedford, Bradford, Cameron, Clarion, Clinton, Elk, Forest, Fulton, Greene, Huntingdon, Jefferson, Juniata, McKean, Mifflin, Montour, Perry, Pike, Potter, Snyder, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Wayne, and Wyoming). Data used for these counties are small area (PUMA) figures.
<b>Relevance:</b>	Parental job loss has negative effects on children's outcomes, including their academic achievement and long-run educational and labor market outcomes. Paternal job loss is also harmful to children's physical and mental health, particularly among children in low-socioeconomic status families. <sup>125</sup>

**Low Birth Weight**

<b>Definition:</b>	Percentage of births weighing less than 2,500 grams
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Children born low weight are more likely to experience developmental, motor, and cognitive delays, autism spectrum and attention deficit hyperactivity disorders, and eclectic and febrile seizures. <sup>126</sup>

**Maternal Depression**

<b>Definition:</b>	Rate (per 100) of diagnosed depression among Medicaid-enrolled women who were pregnant or gave birth in the past 3 years
<b>Year:</b>	2016
<b>Source:</b>	2020 Family Support Needs Assessment (FSNA) Report using data provided by Pennsylvania Department of Human Services Office of Medical Assistance Programs, Medicaid Claims, Birth Certificate Records; and Pennsylvania Department of Health, Bureau of Health Statistics and Research
<b>Relevance:</b>	Children exposed to maternal depression are at higher risk for developmental vulnerability, characterized by delays related to physical health and well-being, social competence, emotional maturity, language and cognitive development, and communication skills and general knowledge. <sup>127</sup>

Maternal Tobacco Use	
<b>Definition:</b>	Rate (per 100) of births to mothers who used tobacco during pregnancy
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center Using data provided by the Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Smoking during pregnancy has been linked to numerous adverse effects for babies, including premature birth, damage to developing lungs and brain, and an increased likelihood of birth defects. Premature birth has also been associated with many risk factors for Early Intervention, including low birth weight, cerebral palsy, developmental delays, and problems with hearing and eyesight. <sup>128</sup>
Maternal Vulnerability	
<b>Definition:</b>	Combined score based on: outcomes related to reproductive healthcare, physical health, mental health & substance use, general healthcare, socioeconomic determinants, and the physical environment
<b>Year:</b>	2021
<b>Source:</b>	Maternal Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Division of Vital Statistics
<b>Relevance:</b>	Research has revealed a higher risk of developmental delays in toddlers whose mothers experienced more negative life events, greater negative impact of events, and higher perceived stress over the year. <sup>129</sup> Maternal vulnerability represents a number of life circumstances that can affect stress levels, including health, socioeconomic status, and neighborhood conditions.
Medicaid Births	
<b>Definition:</b>	Percentage of births with principal payment source of Medicaid
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Medicaid/CHIP-only children with special health care needs are more likely to have an intellectual or developmental disability (I/DD) when compared to those with private insurance only. <sup>130</sup>
Pediatricians	
<b>Definition:</b>	Rate of pediatricians (per 100,000 children ages birth to 17)
<b>Year:</b>	2021-2023
<b>Source:</b>	American Board of Pediatricians (ABP) using data provided by ABP Certification Management System; American Board of Medical Specialties; and U.S. Census Bureau, American Community Survey (ACS)
<b>Relevance:</b>	Access to healthcare is critical for early intervention participation, as the majority of EI referrals come from medical professionals. <sup>131</sup>
Physical Environment	

<b>Definition:</b>	Combined score (relating to maternal vulnerability) based on: environmental factors in the area that influence maternal health outcomes, including violent crime rates, housing conditions, pollution, and access to transportation
<b>Year:</b>	2021
<b>Source:</b>	Maternal Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Division of Vital Statistics
<b>Relevance:</b>	A growing body of research in the United States and Western Europe documents significant effects of the physical environment (toxins, pollutants, noise, crowding, chaos, and housing, school and neighborhood quality) on children and adolescents' cognitive and socioemotional development. <sup>132</sup>

**Pregnancy & Postpartum Substance Use Disorder**

<b>Definition:</b>	Rate (per 100) of substance use disorder among Medicaid-enrolled mothers who were pregnant or delivered live births in the past 3 years
<b>Year:</b>	2016
<b>Source:</b>	2020 Family Support Needs Assessment (FSNA) Report using data provided by Pennsylvania Department of Human Services Office of Medical Assistance Programs, Medicaid Claims; and Pennsylvania Department of Health, Bureau of Health Statistics and Research, Birth Certificate Records
<b>Relevance:</b>	Alcohol use during pregnancy is a highly preventable cause of birth defects and developmental disabilities. An infant born to a mother who drank alcohol while pregnant will likely exhibit alcohol-related birth defects (e.g., problems with the heart, kidneys, bones, or hearing), alcohol-related neurodevelopmental disorders (e.g., intellectual disabilities or problems with behavior and learning), or fetal alcohol spectrum disorders (FASD), which includes a wide range of effects, from mild to severe. <sup>133</sup>

**Prenatal Care**

<b>Definition:</b>	Rate (per 100) of mothers receiving prenatal care in the 1st trimester
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Maternal health care prior to and during pregnancy plays a key role in child health at birth, which helps establish the basis for lifelong health and development. <sup>134</sup>

**Preschool Enrollment**

<b>Definition:</b>	Percentage of 3- and 4-year-olds attending preschool
<b>Year:</b>	2013-2017
<b>Source:</b>	Opportunity Index using data provided by the U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates
<b>Relevance:</b>	The quality of a child's early experiences makes a critical difference as their brains develop, providing either strong or weak foundations for learning, health and behavior throughout life. In the first few years of life, more than one million neural connections are formed each second – a pace never repeated again. <sup>135</sup>

	Preschool provides a stimulating environment for children that aids in their development.
<b>Preterm Births</b>	
<b>Definition:</b>	Rate (per 100) of live births born before 37 weeks of pregnancy
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Preterm birth can lead to long-term intellectual and developmental disabilities for babies, often leading to delays in physical development, learning, communicating, taking care of themselves, and getting along with others. Long-term conditions linked to preterm birth include cerebral palsy, behavior problems, mental health conditions, and neurological disorders. <sup>136</sup>
<b>Public Assistance</b>	
<b>Definition:</b>	Percentage of households with children under 18 years of age who have received SSI, cash assist, or SNAP in the past 12 months
<b>Year:</b>	2013-2017
<b>Source:</b>	2020 Family Support Needs Assessment, U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates
<b>Relevance:</b>	Socioeconomic status influences a child's health and aptitudes in the early years, which in turn influences early cognitive and social development, and readiness to learn. <sup>137</sup> Areas with high utilization of public assistance are therefore at an increased risk for needing early intervention services.
<b>Quality of Life</b>	
<b>Definition:</b>	Combined score (relating to overall county health) based on: population's poor physical health, poor mental health, and low birthweight
<b>Year:</b>	2014-2020
<b>Source:</b>	County Health Rankings using data provided by U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveillance System (BRFSS) and National Center for Health Statistics
<b>Relevance:</b>	Children born to parents suffering from mental illnesses such as ADHD, anxiety, depression, schizophrenia, bipolar disorder, or substance abuse issues are more likely to develop mental illnesses themselves, have developmental delays, cognitive disabilities, and social-emotional challenges. <sup>138</sup> Children born low weight are also more likely to experience developmental, motor, and cognitive delays, autism spectrum and attention deficit hyperactivity disorders, and eclectic and febrile seizures. <sup>139</sup>
<b>Racial &amp; Ethnic Minority Status of Children</b>	
<b>Definition:</b>	Percentage of population birth to age 19 that identifies as Hispanic or Latino, Black or African American, American Indian and Alaska native, Native Hawaiian and other Pacific Islander, and two or more races
<b>Year:</b>	2021

<b>Source:</b>	KIDS COUNT Data Center using data provided by the U.S. Census Bureau, Population and Housing Unit Estimates
<b>Relevance:</b>	A constellation of social factors has been found to influence EI access and enrollment. Several studies have shown that children who are black, non-Hispanic, have a developmental delay, and those who are poor or publicly insured, are less likely to access EI than children who are white, non-Hispanic and from families with less social risk. <sup>140</sup> Looking at child population demographics can provide an estimate for unaddressed need for EI services.
<b>Racial &amp; Ethnic Minority Status of Population</b>	
<b>Definition:</b>	Percentage of population that identifies as Hispanic or Latino, Black and African American, American Indian and Alaska native, Asian, Native Hawaiian and other Pacific Islander, two or more races, and other races
<b>Year:</b>	2020
<b>Source:</b>	Social Vulnerability Index using data provided by the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Agency for Toxic Substances and Diseases (ATSDR)
<b>Relevance:</b>	A constellation of social factors has been found to influence EI access and enrollment. Several studies have shown that children who are black, non-Hispanic, have a developmental delay, and those who are poor or publicly insured, are less likely to access EI than children who are white, non-Hispanic and from families with less social risk. <sup>141</sup> Looking at population demographics can provide an estimate for future need for EI services.
<b>Racial Disparity in Low Birth Weight</b>	
<b>Definition:</b>	Ratio of low birth weight in births born to Black mothers to that in births born to White mothers
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Children born low weight are more likely to experience developmental, motor, and cognitive delays, autism spectrum and attention deficit hyperactivity disorders, and eclectic and febrile seizures. <sup>142</sup> Non-Hispanic (NH) Black mothers are nearly twice as likely as NH White mothers to give birth to a low birth weight baby. <sup>143</sup> Since access to Early Intervention has already found to be limited for families of color, high ratios of racial disparity in low birth weight can indicate high risk for poor developmental outcomes. <sup>144</sup>
<b>Racial Disparity in Prenatal Care</b>	
<b>Definition:</b>	Ratio of Black mothers receiving prenatal care in the 1st trimester to that of White mothers
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	Maternal health care prior to and during pregnancy plays a key role in child health at birth, which helps establish the basis for lifelong health and

development.<sup>145</sup> Seeking early prenatal care is associated with better health outcomes for women and infants, however, notable disparities in prenatal care access persist among U.S. women, particularly among younger, less educated, geographically isolated, and racial/ethnic-minority maternal populations.<sup>146</sup> Since access to Early Intervention has already found to be limited for families of color, high ratios of racial disparity in prenatal births can indicate high risk for poor developmental outcomes.<sup>147</sup>

**Racial Disparity in Preterm Births**

**Definition:** Ratio of preterm births born to Black mothers to that born to White mothers

**Year:** 2020

**Source:** KIDS COUNT Data Center using data provided by Pennsylvania Department of Health (DOH), Division of Health Informatics

**Relevance:** Preterm birth can lead to long-term disabilities for babies, often leading to delays in development and long-term conditions such as cerebral palsy, behavior problems, mental health conditions, and neurological disorders.<sup>148</sup> Persistent Black-White disparity in the prevalence of preterm birth is a complex issue. Since access to Early Intervention has already found to be limited for families of color, high ratios of racial disparity in preterm births can indicate high risk for poor developmental outcomes.<sup>149</sup>

**Racial Disparity in WIC Births**

**Definition:** Ratio of births born to Black mothers enrolled in Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to that of births born to White mothers enrolled in WIC

**Year:** 2020

**Source:** KIDS COUNT Data Center using data provided by the Pennsylvania Department of Health (DOH), Division of Health Informatics

**Relevance:** For families of color, access to Early Intervention is limited. Compared to their White peers with developmental delays, Black and Latino children with developmental delays are 78% less likely to have their need for EI services identified.<sup>150</sup> It has also been found that babies from non-low-income backgrounds are 26% more likely to have a developmental screening than babies from low-income backgrounds.<sup>151</sup> Since WIC is a nutritional assistance program for low-income women and children, high ratios of racial disparity in WIC births can indicate high risk for poor developmental outcomes.

**SNAP Enrollment**

**Definition:** Percentage of children enrolled in supplemental nutrition assistance program (SNAP)

**Year:** 2021

**Source:** KIDS COUNT Data Center using data provided by Pennsylvania Department of Human Services (DHS), Office of Income Maintenance, Bureau of Program Support

**Relevance:** Individuals must be extremely low-income to be eligible for Supplemental Nutrition Assistance Program (SNAP). Because low socioeconomic status has



	been found to negatively influences a child’s health and development, high rates of families utilizing SNAP represent an increased risk for poor developmental outcomes. <sup>152</sup>
<b>Social &amp; Economic Factors</b>	
<b>Definition:</b>	Combined score (relating to overall county health) based on: population's education, employment, income, family and social support, and community safety
<b>Year:</b>	2016-2021
<b>Source:</b>	County Health Rankings using data provided by the U.S. Census Bureau, American Community Survey (ACS), Small Area Health Insurance Estimates (SAHIE) and County Business Patterns (CBP); U.S. Department of Labor, Bureau of Labor Statistics (BLS); and U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics
<b>Relevance:</b>	Children living in areas with lower median incomes are less likely to receive Early Intervention services. <sup>153</sup> It has also been found that babies from non-low-income backgrounds are 26% more likely to have a developmental screening than babies from low-income backgrounds. <sup>154</sup>
<b>Socioeconomic Status</b>	
<b>Definition:</b>	Combined score (relating to social vulnerability) based on: population living below 150% poverty, unemployment rate, housing cost burden, low educational attainment, and lack of health insurance
<b>Year:</b>	2020
<b>Source:</b>	Social Vulnerability Index using data provided by U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Agency for Toxic Substances and Diseases (ATSDR)
<b>Relevance:</b>	Socioeconomic status (SES)—indexed via parent educational attainment, parent occupation, and family income—is a powerful predictor of children’s developmental outcomes. Variations in these resources predict large academic disparities among children from different socioeconomic backgrounds that persist over the years of schooling, perpetuating educational inequalities across generations. <sup>155</sup>
<b>TANF Enrollment</b>	
<b>Definition:</b>	Percentage of children enrolled in temporary assistance for needy families (TANF)
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Department of Human Services (DHS), Office of Income Maintenance, Bureau of Program Support
<b>Relevance:</b>	Individuals must be extremely low-income to be eligible for Temporary Assistance for Needy Families (TANF). <sup>156</sup> Because low socioeconomic status has been found to negatively influences a child’s health and development, high

	rates of families utilizing TANF represent an increased risk for poor developmental outcomes. <sup>157</sup>
<b>Unemployment</b>	
<b>Definition:</b>	Percentage of population over age 18 not working
<b>Year:</b>	2021
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Department of Labor and Industry (L & I), Center for Workforce Information and Analysis
<b>Relevance:</b>	Parental job loss has negative effects on children's outcomes, including their academic achievement and long-run educational and labor market outcomes. Paternal job loss is also harmful to children's physical and mental health, particularly among children in low–socioeconomic status families. <sup>158</sup>
<b>WIC Births</b>	
<b>Definition:</b>	Percentage of births to mothers enrolled in the Special Supplemental Nutrition Program for Women, Infants, & Children (WIC)
<b>Year:</b>	2020
<b>Source:</b>	KIDS COUNT Data Center using data provided by the Pennsylvania Department of Health (DOH), Division of Health Informatics
<b>Relevance:</b>	It has been found that babies from non-low-income backgrounds are 26% more likely to have a developmental screening than babies from low-income backgrounds. <sup>159</sup> Since WIC is a nutritional assistance program for low-income women and children, high rates of WIC births can indicate high risk for poor developmental outcomes.

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