The Impact of Social Determinants of Health on Feto-infant Mortality in Delaware County



Baby's 1st Project conducted a Perinatal Periods of Risk (PPOR) study.

PPOR is a data-to-action tool for studying racial disparities in fetal and infant mortality rates. PPOR helps communities identify and prevent risk factors contributing to disparities in birth outcomes through 3 phases. This study focuses on the social determinants of health associated with high rates of feto-infant mortality among black/African American women in Delaware County.

Determine when the disparity in feto-infant mortality rates is highest.

PHASE Identify factors that contribute to the disparity in deaths.

Take action based on priorities established during earlier phases.

In Delaware County, the fetal and infant mortality rate is

2.5 times higher

among black women compared to white women. The majority of this disparity occurs among babies weighing less than 1500 grams.

Feto-infant mortality rates are higher among Non-Hispanic Black women compared to Non-Hispanic White women, especially among the smallest babies.

Total Feto-infant Mortality Rate

Mortality rate at <1500g

deaths per 1,000 births , 2012-2016

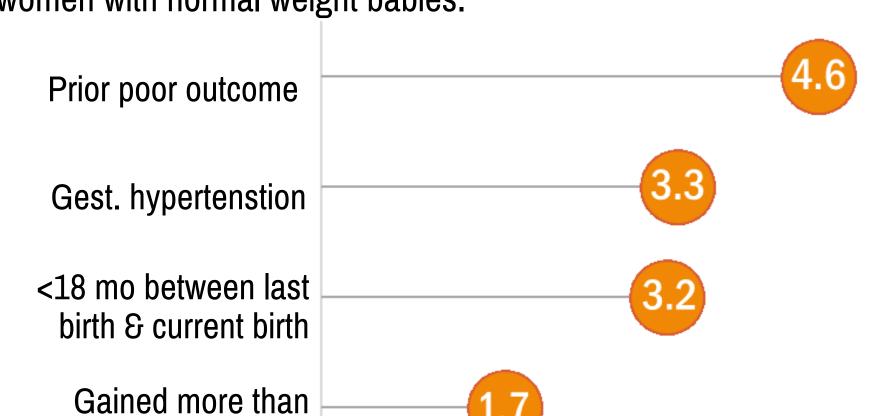
Preventing black babies from being born at very low birthweights will reduce the mortality disparity.
Studying risk factors for very low birthweight helps focus efforts.

Too many black babies being born small is the reason for excess 100% mortality of the time ...not because they are more likely to die at low

...not because they are more likely to die at <mark>low</mark> birthweights than white babies.

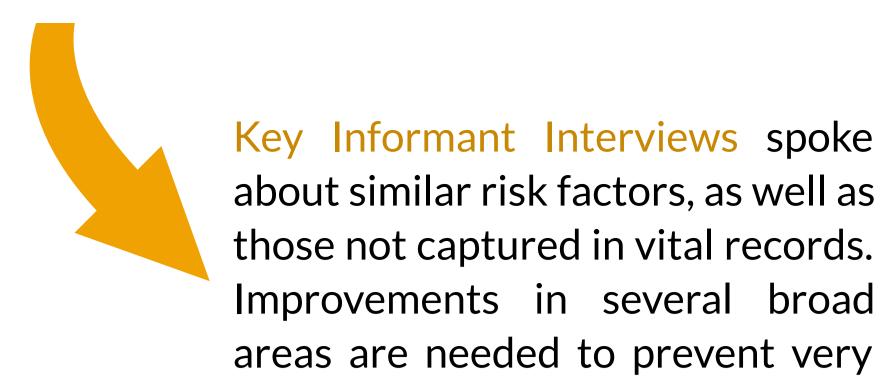
Analysis of vital records showed prominent risk factors among black women with very low birthweight babies vs. those with normal birthweight babies.

Black women with very low birthweight babies were nearly 5 times as likely to have a prior poor birth outcome than black women with normal weight babies.

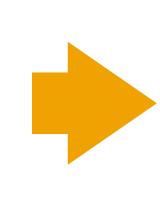


Of note, WIC participants have a lower risk of having a very low birth weight baby.

recommended weight



low birthweight births.



Stress and mental health



Early/Preconception health



Poor prior birth outcomes



Pregnancy Planning

Housing



The health system and provider-patient relationships



Early access to care and preconception prevention and treatment of maternal disease are desperately needed.



"We spend so much time worrying about the clinical and medical and not enough on the social, spiritual and environmental side of things.



Racism causes stress.



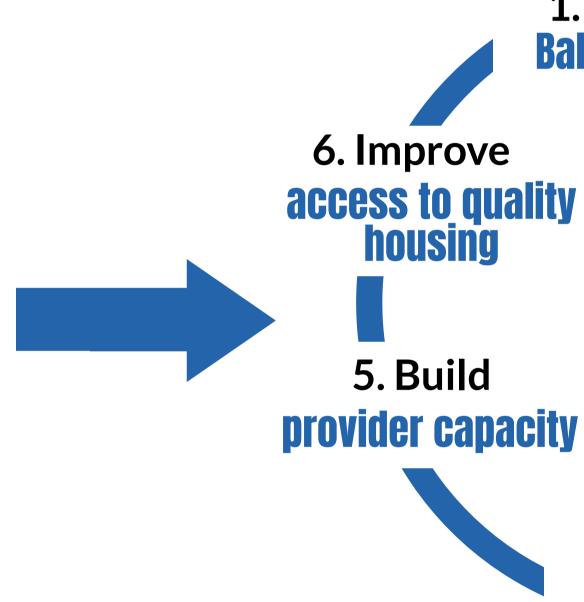


1. Strengthen

Baby's 1st project

We are taking action and need your help!

Using the PPOR findings, Baby's 1st Project worked with diverse community stakeholders to develop a data-informed Strategic Plan. The plan includes 6 overarching goals:



2. Bolster community-based **support**

3. Improve health care & social service delivery/access

4. Develop programs for targeted populations

Baby's 1st Project

Baby's 1st Project is a crosssector group of community partners working to reduce disparities in birth outcomes and to improve the feto-infant mortality rate in Delaware County. We do this by strengthening partnerships among maternal and child health organizations who work with Delaware County families during pregnancy through their child's 5th birthday. The Perinatal Periods of Risk (PPOR) study informs Baby's 1st.

Our Guiding Principles

- Racism and trauma are prominent stressors and determinants of health, including preterm birth.
- Chronic stress affects all aspects of the lives of women and families.
- Reproductive life planning is an essential aspect of women's health.

The Data

Analysis was conducted using vital records data of all live births, infant deaths, and fetal deaths (N=33,752)in Delaware County between 2008 and 2012. Data was obtained from the Pennsylvania Department of Health, Bureau of Health Statistics & Registries.

Key informant interviews were conducted with local social service and health care organizations. The PPOR framework was developed by CityMatCH with its partners.

Data analysis for the PPOR study was conducted by Public Health Management Corporation's Research & Evaluation Group

