



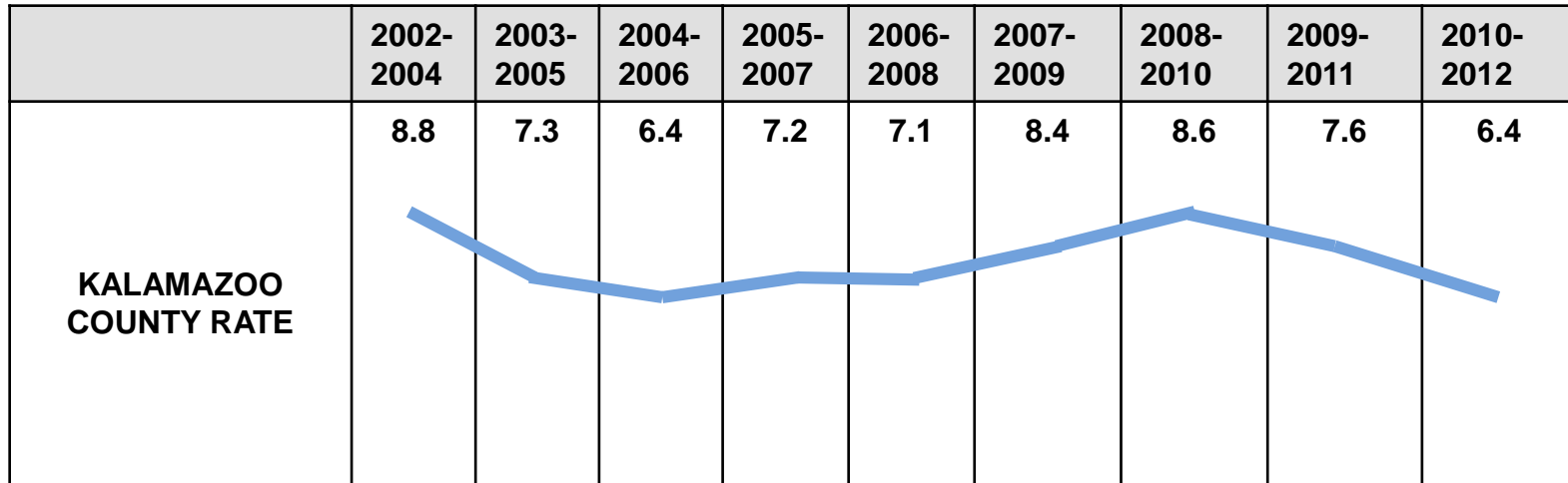
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Kothari, C.L., Romph, C., Back, Y.O., Bautista, T., Lenz, D.L. (under review). Perinatal Periods of Risk Analysis: Disentangling Race and Socioeconomic Status to Inform a Black Infant Mortality Community Action Initiative.

# Infant Mortality & Racial Disparities Trends, Kalamazoo County, 2002-2012

Infant Mortality Rates per 1,000 Live Births, Three-year moving Averages



Source: Michigan Department of Community Health, Division for Vital Records and Health Data Development. *Michigan Infant Death Statistics*. March, 2014.

# Infant Mortality & Racial Disparities Trends,

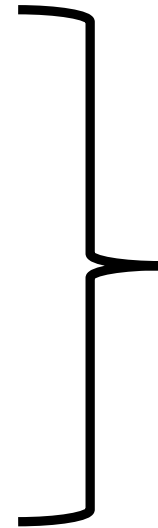


# Poverty and Race EACH contribute risk...

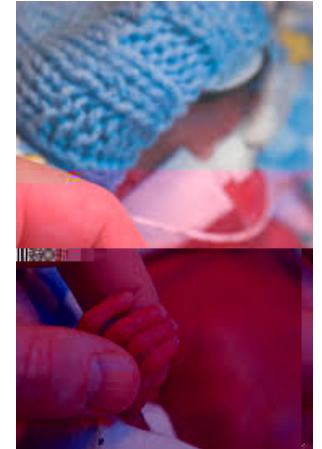
Poverty  
1.7X ↑



Black Race  
1.6X ↑



Low Birth Weight\*



...but kind  
of risk? ...and does it  
vary?



# Perinatal Periods of Risk (PPOR)





# Perinatal Periods of Risk (PPOR)



500-  
1499 g



Infant birth weight

1500+ g



The National Organization of Urban MCH Leaders



# Perinatal Periods of Risk (PPOR)



Fetal Neonatal Post neonatal

500-1499 g



Age at death

1500+ g



The National Organization of Urban MCH Leaders





Fetal

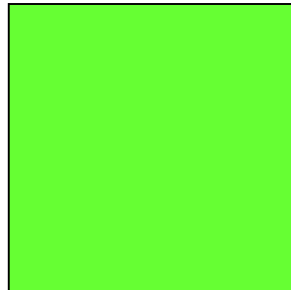
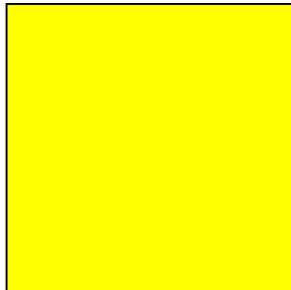
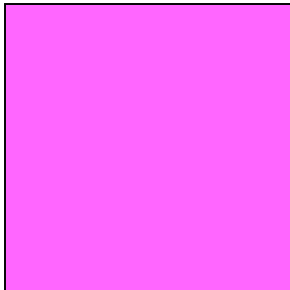
Neonatal

Post  
neonatal

500-  
1499 g



1500+ g



**“Excess  
Mortality”  
BLACK RACE**

# **PPOR (2003-2012)**

## **Excess Mortality: Black Women**

Black women

15.2 IMR

-

Reference\*

# PPOR (2003-2012)

## Excess Mortality: Black Women

$$\begin{array}{|c|} \hline \text{Black women} \\ \hline 15.2 \text{ IMR} \\ \hline \end{array} - \begin{array}{|c|} \hline \text{Reference} \\ \hline 4.2 \text{ IMR} \\ \hline \end{array} = 11.0 \text{ IMR}$$

$$\begin{array}{rclcl} \text{Black women} & - & \text{Reference} & & \\ \text{15.2 IMR} & - & 4.2 \text{ IMR} & = & 11.0 \text{ IMR} \end{array}$$

# Perinatal Periods of Risk Assessment

## TRENDS in Excess Mortality of Black Women

1997-

Maternal Health/  
Prematurity

5.1

Maternal  
Care  
2.0

Newborn  
Care  
0.2

Infant  
Health  
2.9

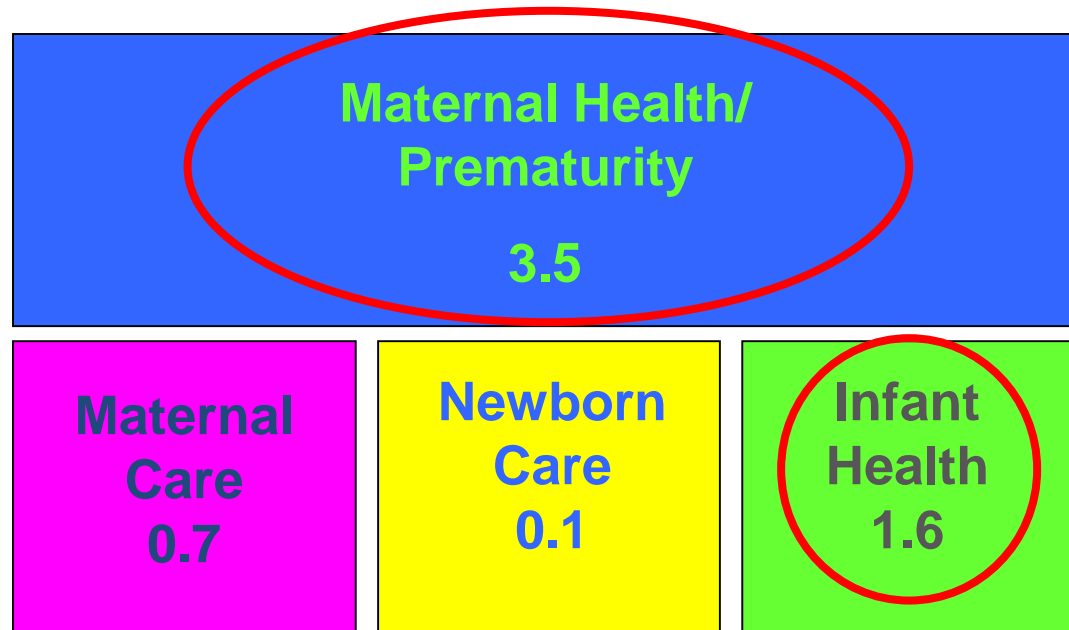


**“Excess  
Mortality”  
POVERTY**

# Perinatal Periods of Risk Assessment (2003-2012)

**Excess Mortality: Poor Women**

[Poor women – Reference Group]



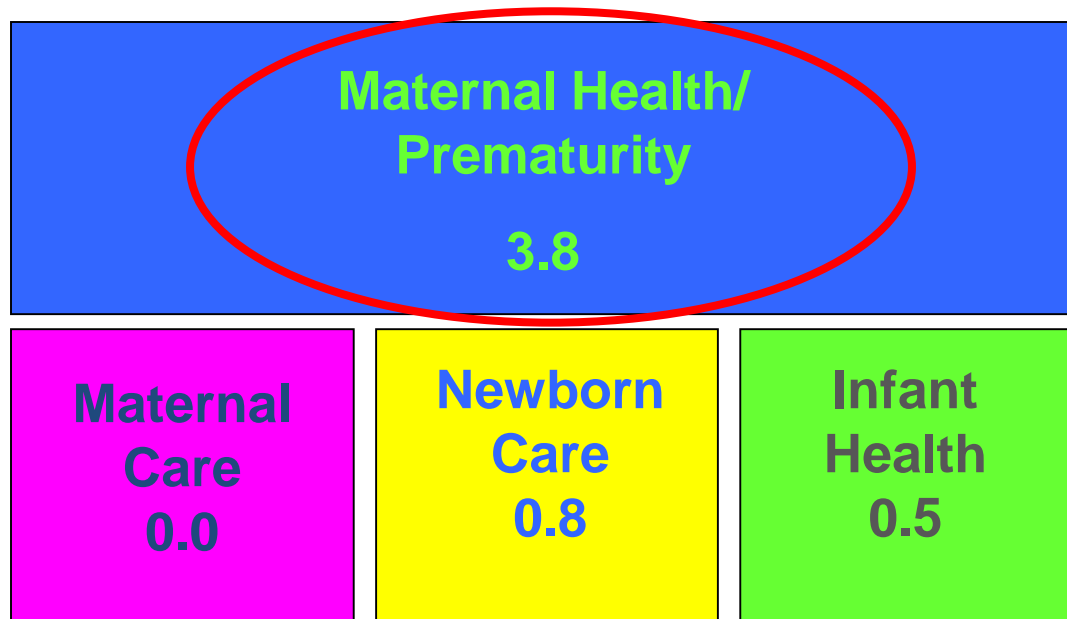
\* Medicaid-paid birth

**BLACK  
“Excess  
Mortality”  
after**

**accounting  
for POVERTY**

# Perinatal Periods of Risk Assessment (2003-2012)

**Excess Mortality: Black women – Poor Women**



# Perinatal Periods of Risk Assessment

**Excess Mortality: Black Women – Poor Women**

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**Maternal Health/  
Prematurity**

**1.9**

**Maternal  
Care  
0.3**

**Newborn  
Care  
-0.6**

**Infant  
Health  
0.7**

# What We Learned

- **The majority of mortality risk associated with Black race is related to**

# What We Did

- **Formed an infant mortality community action initiative**
  - **Collaboration between YWCA, public health department, maternal-infant-early childhood home visitation programs, WMed, hospitals, clinics, faith community, local funders**
  - **Formal strategic planning process**

## Vision:

- Reduce the infant mortality rate in racial ethnic minorities to 6.0 (per 1000 births) in Kalamazoo County by 2020.

## Intended Populations:

- Female residents of Kalamazoo County ages 15-44:
  - Who are black
  - Who have incomes at or below FPL
  - Who have previous poor birth outcomes

# What We Did

- **Raised awareness about the problem and the solutions**
  - **Four community wide meetings, between 100-150 participants each**
  - **NAACP/ faith community**



- **Integrated Cultural Competency**

—

# What We Did

- **Developed/ing infrastructure**

- **Launched Safe Sleep Campaign**
  - Presentations to medical, social service and public health providers
  - Developed a toolkit, specific to Kalamazoo
  - Promoted safe sleep on social media, local radio

# What We Plan to Do Next

- **Expand to include Fathers**

- Educational/ Recreational fatherhood events in community
- Case managers specific to fathers
- Partner with other community groups supporting men and fatherhood

- **Community Survey of delivering mothers**

- Experiences with medical, public health & social service providers
- Experiences with discrimination
- Barriers faced, coping strategies