



Infant Mortality in Miami-Dade County

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- Nancy Vazquez
- Britney James
- Epidemiology Team

County Infant Mortality Analysis

The Florida Department of Health in Miami-Dade County conducted a County Infant Mortality Analysis

- to review infant mortality rates
- to examine select maternal and infant health factors
- to assess social determinants of health

Introduction

What is infant mortality and why does it matter to health equity and health disparity?



Overview

Although Miami-Dade County experienced declining infant mortality rates, persistent racial and ethnic disparities continue.

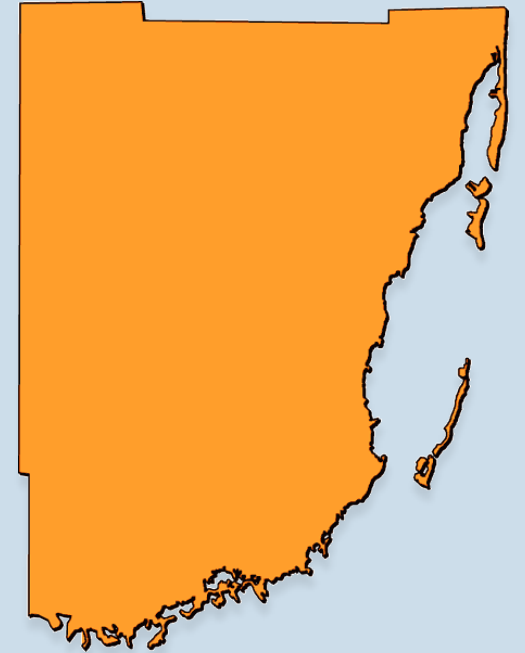
Non-Hispanic Black infants experience high infant mortality rates, almost three times the rates of Non-Hispanic White and Hispanic infants.

Such health disparities are generally associated with social determinants.



Key Miami-Dade County Findings

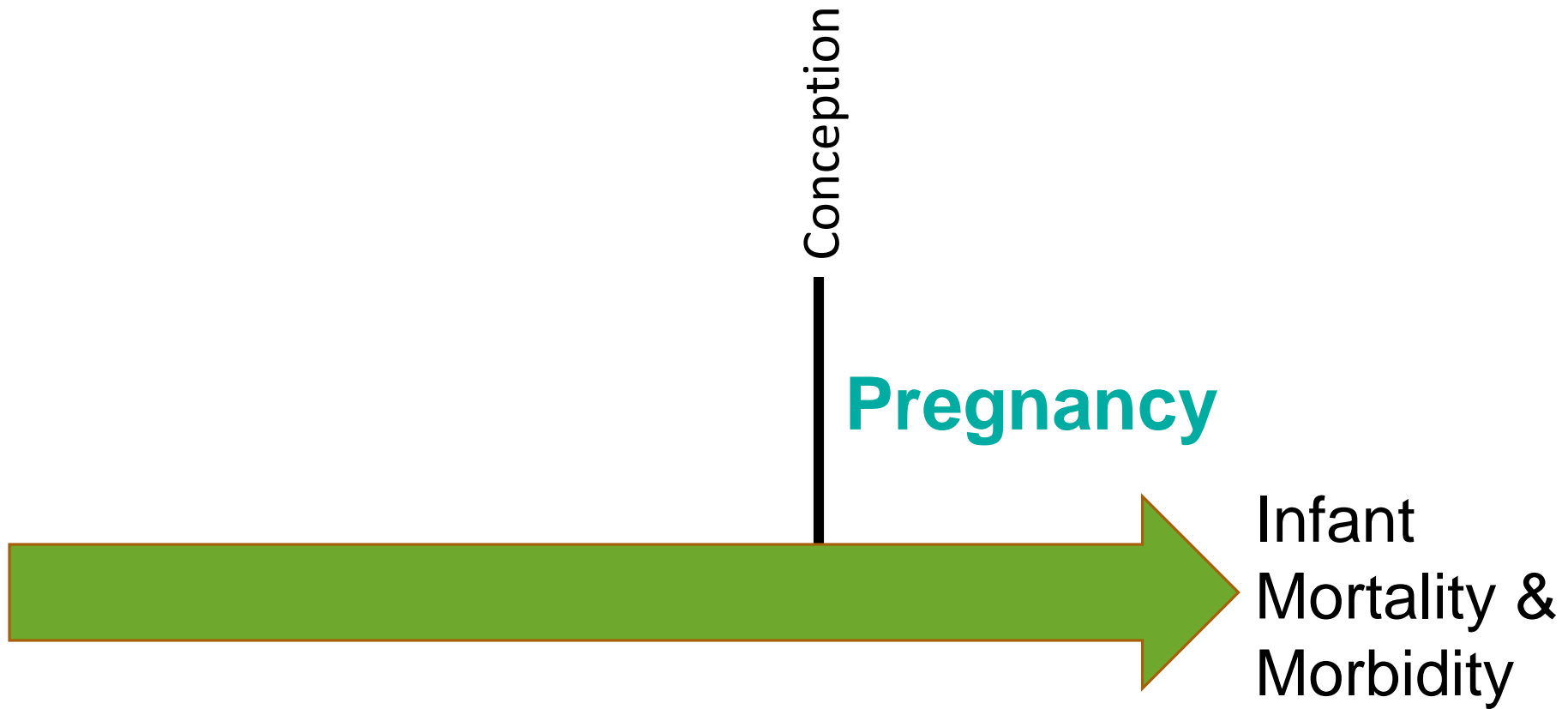
- The infant mortality rate is 4.6, decreasing 24% over last 10 years.
- This rate is lower than Florida's and U.S.'s rate.
- This rate is the same or lower than Hillsborough, Broward, and Palm Beach Counties.
- Neighborhoods with high Low Birth Weight (LBW) percentages and high infant mortality rates are strongly correlated.
- Neighborhoods with increasing social disadvantage correlated with areas with high infant mortality rates.

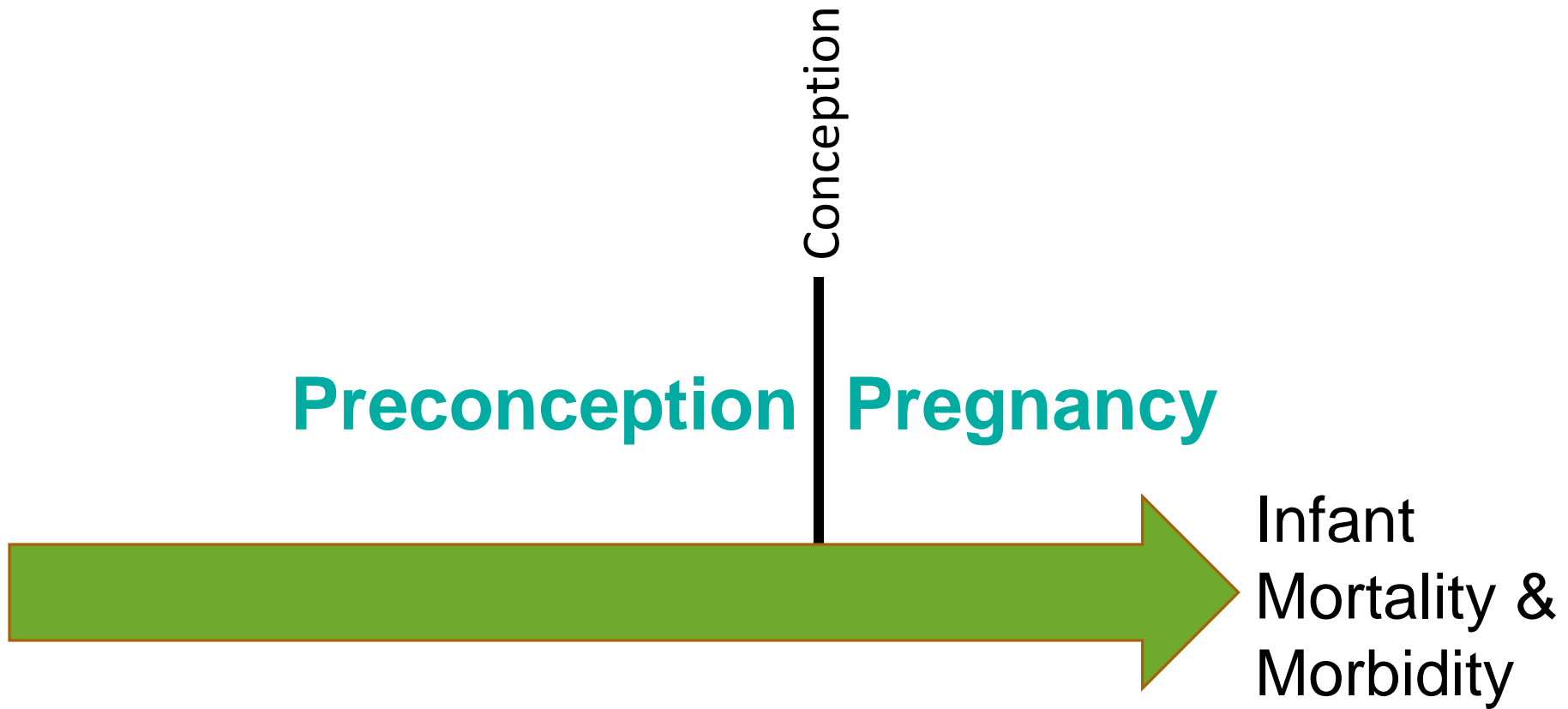


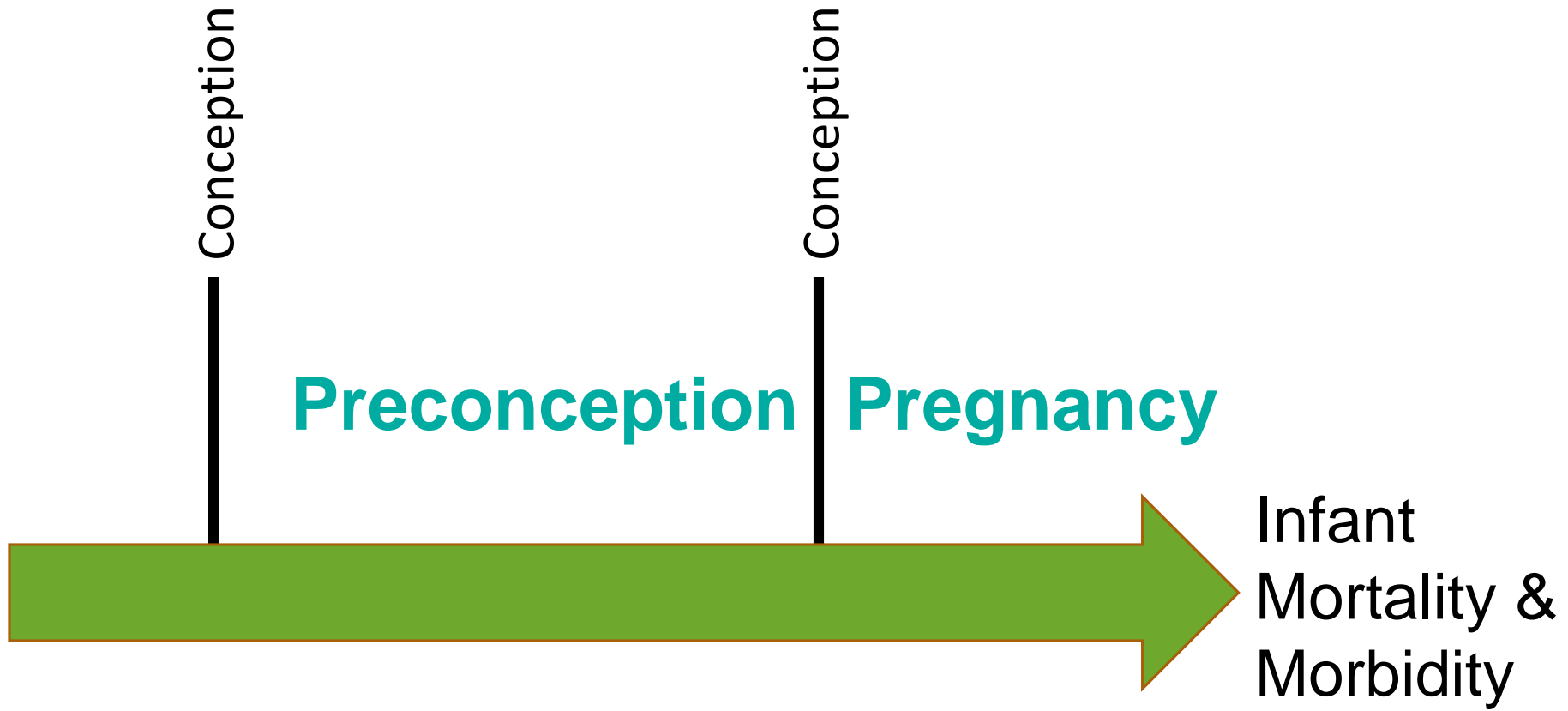
Background

Health is determined in part by social conditions in the places where residents live, learn, work, and play (CDC, 2015).

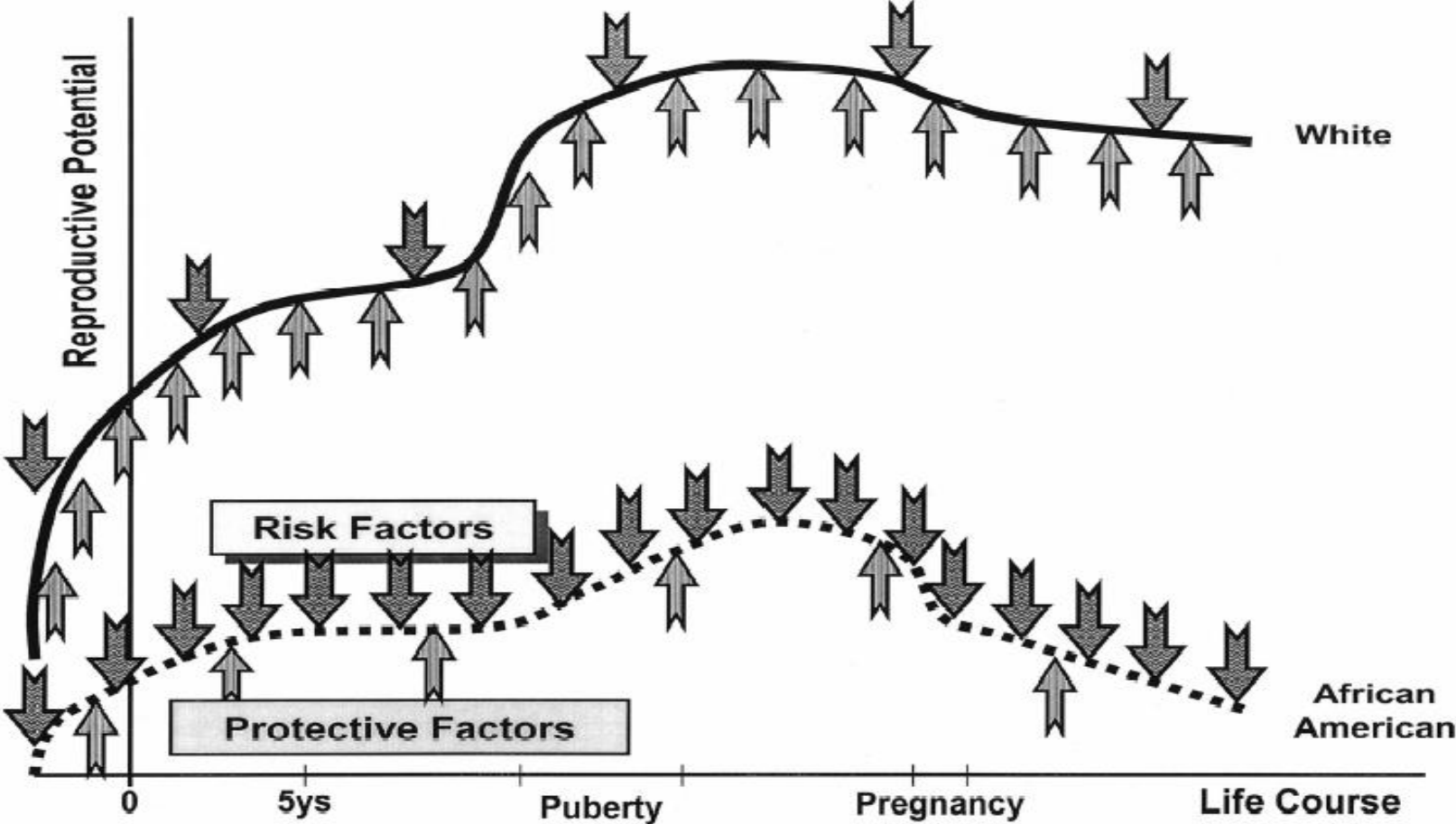




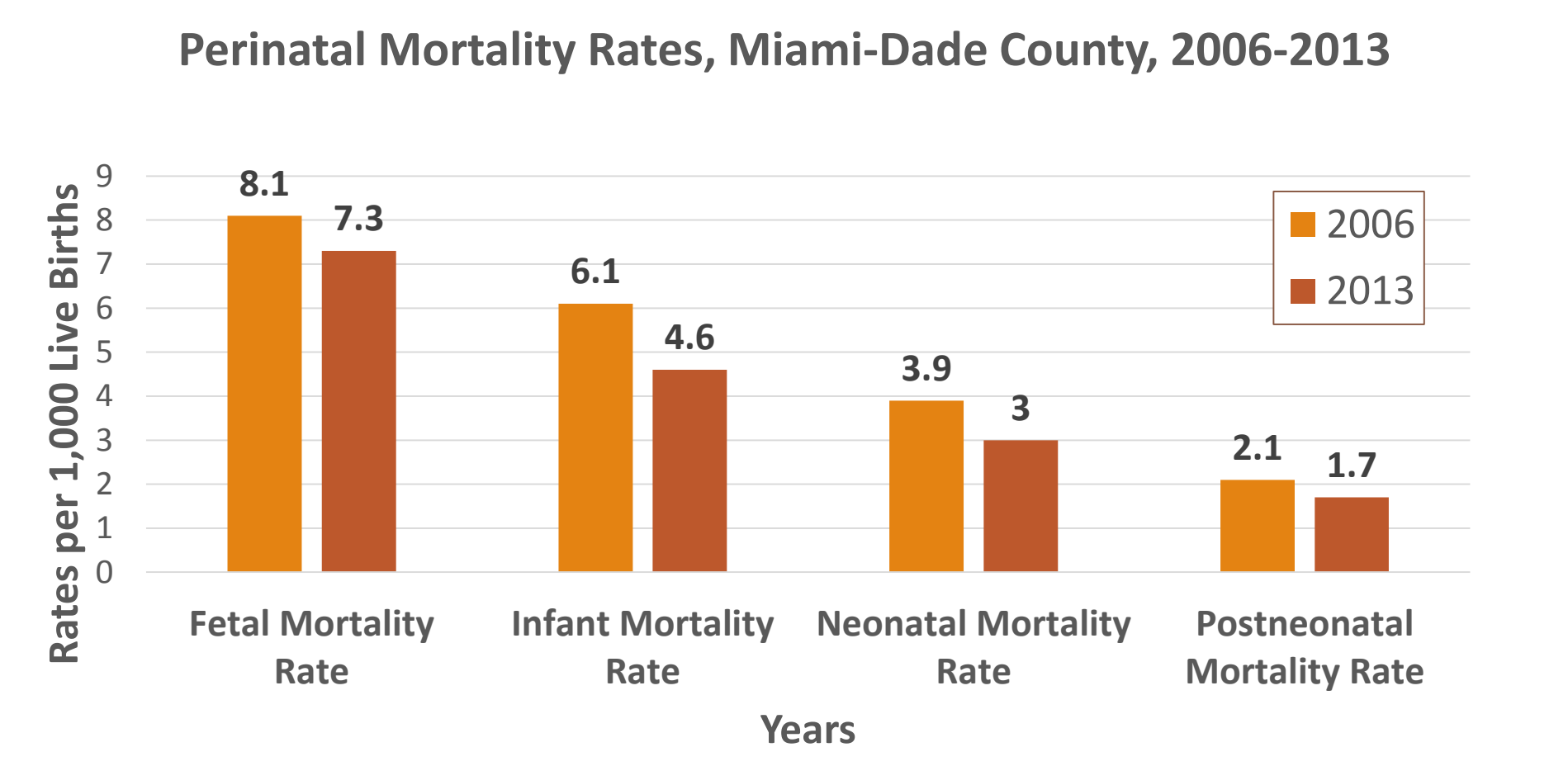




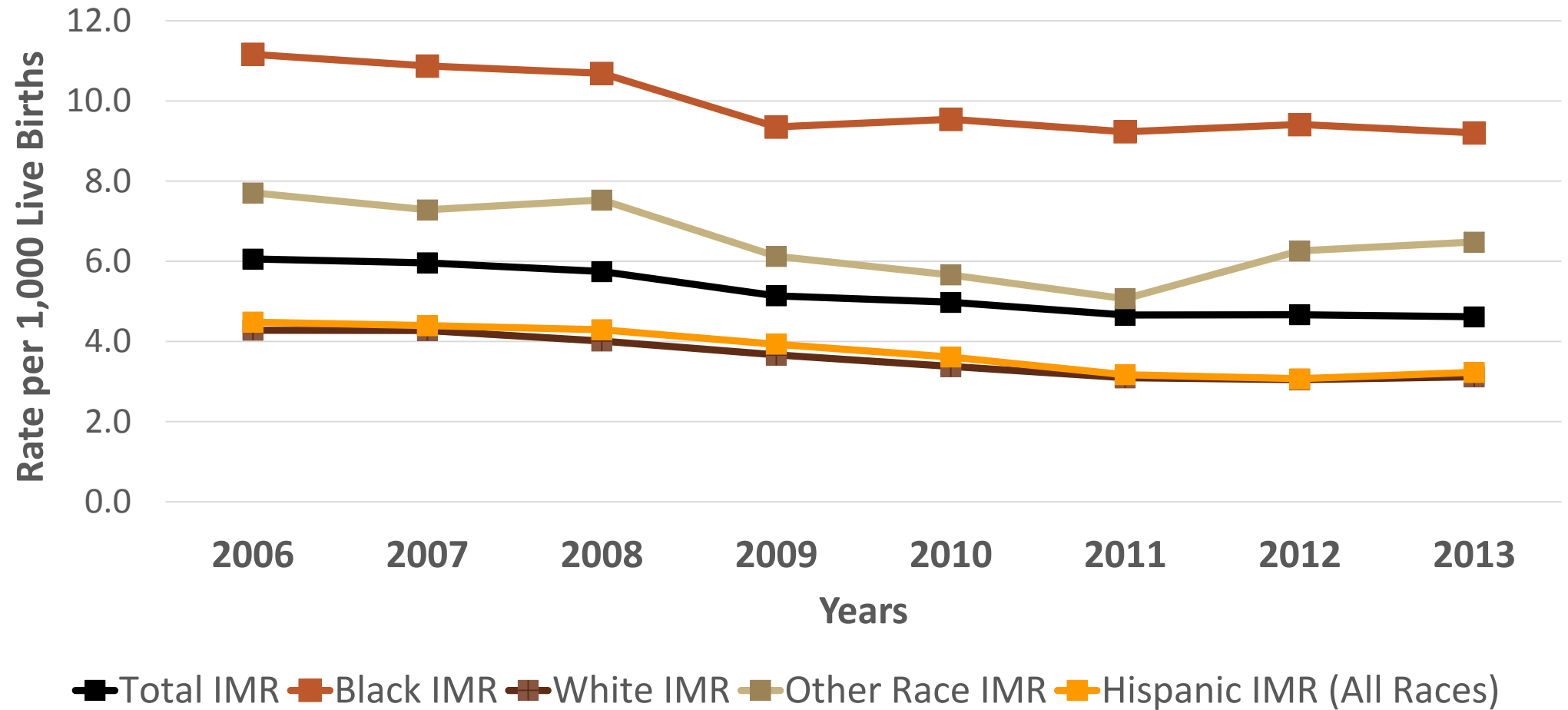
Life Course Perspective



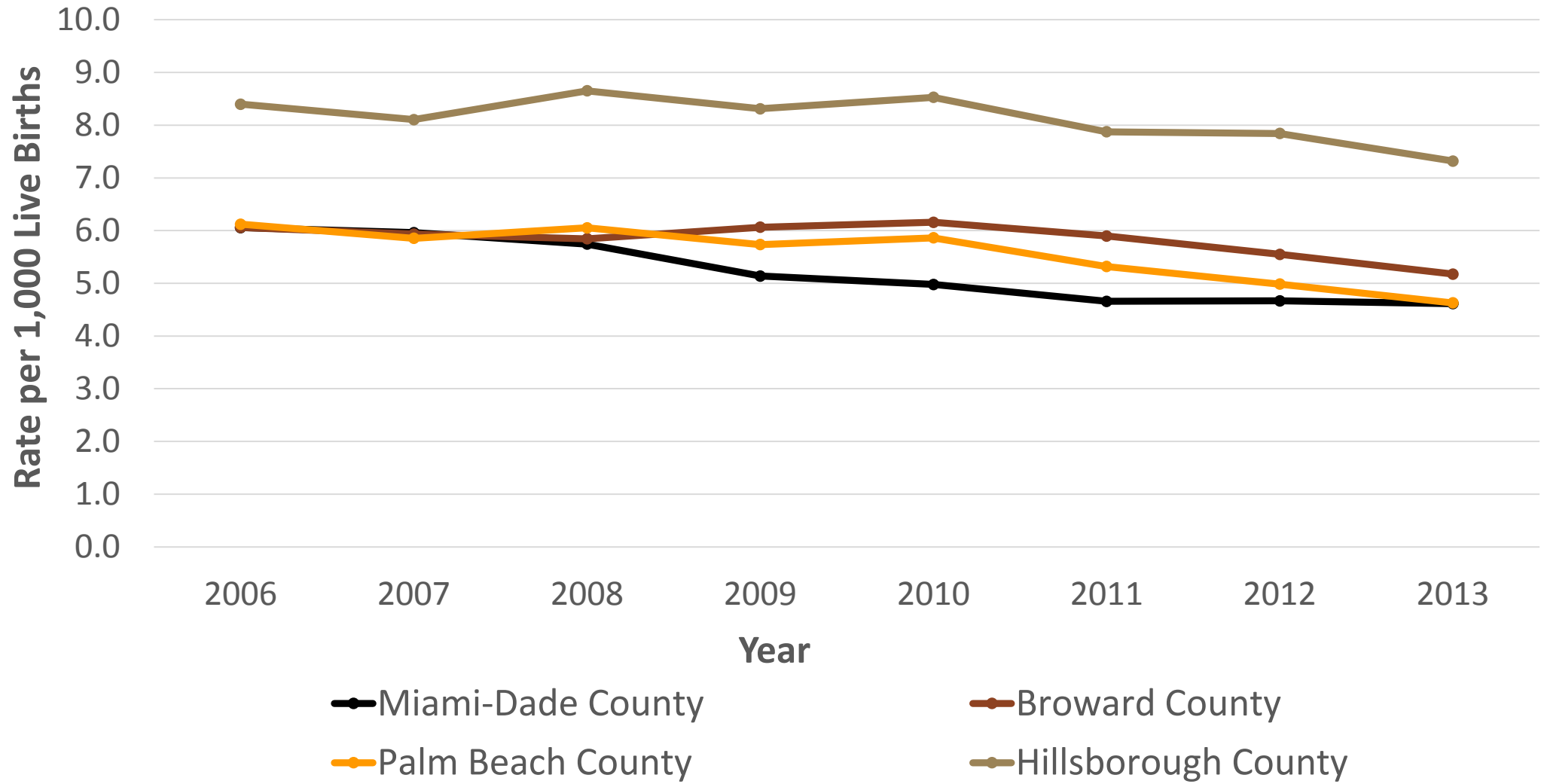
Perinatal Mortality



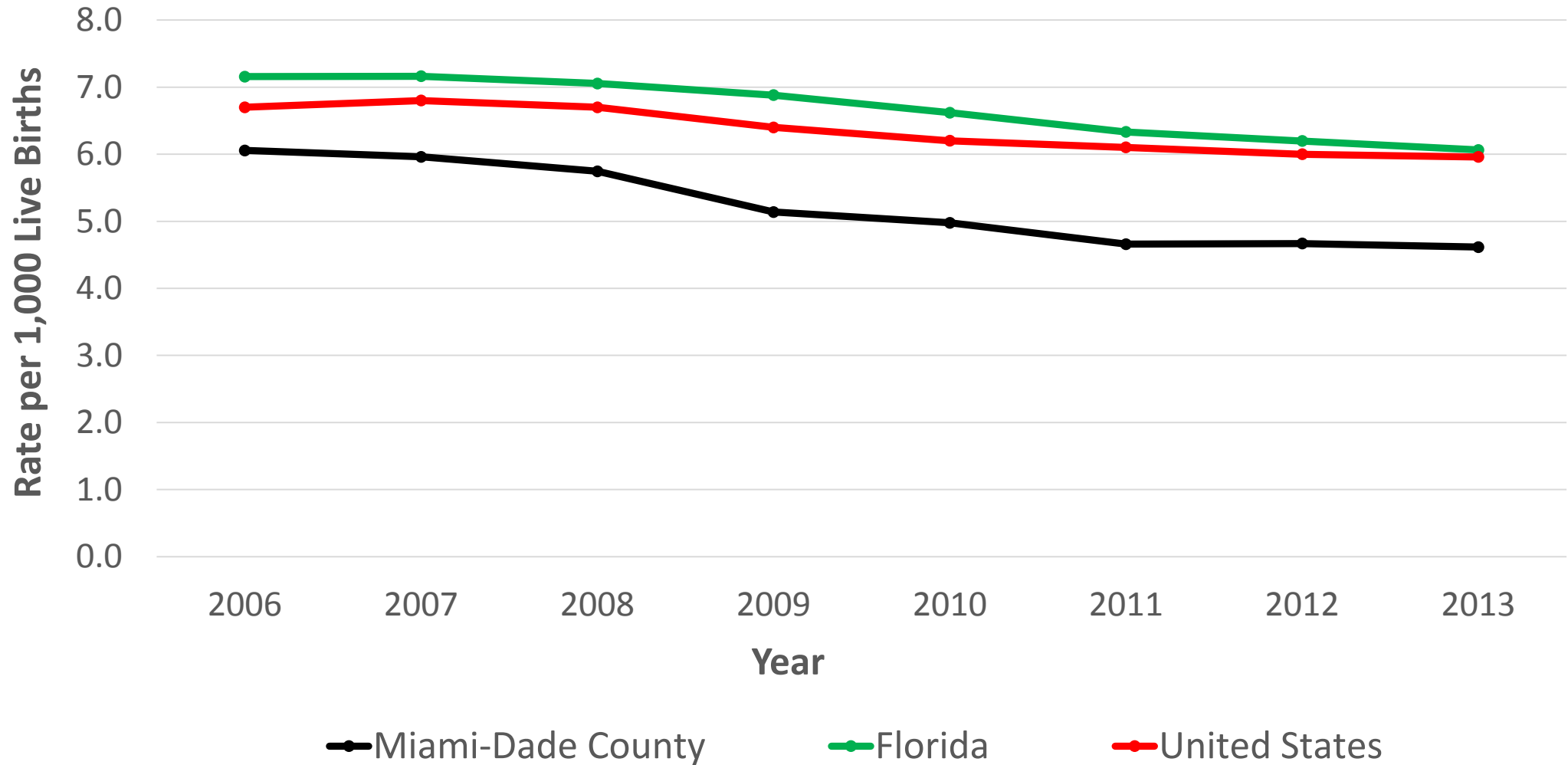
3-Year Infant Mortality Rates Miami-Dade County, 2005-2014



3-Year Infant Mortality Rates across Florida, 2005-2014



3-Year Infant Mortality Rates, Florida & U.S., 2005-2014

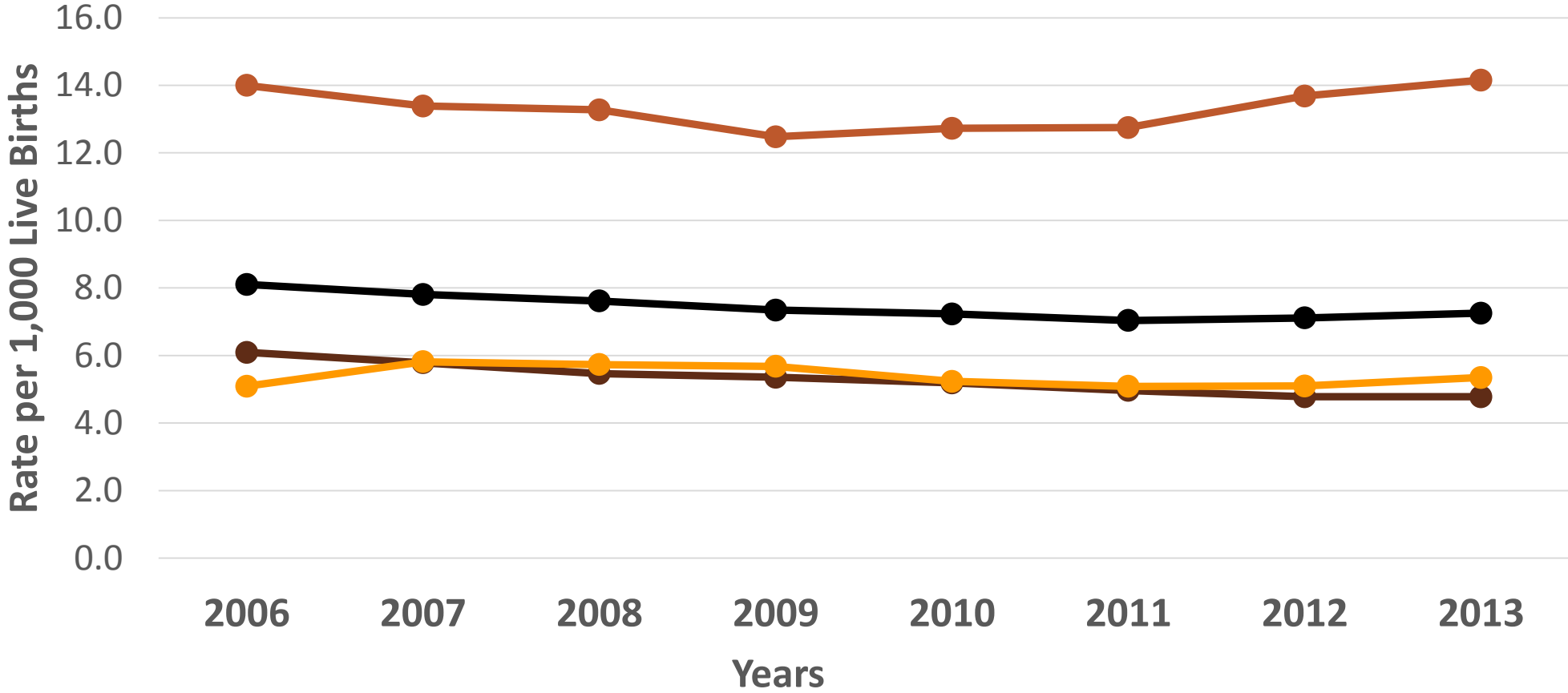


Fetal Rate

Fetal mortality represents a spontaneous intrauterine death of a fetus. In Florida, fetal death registration occurs for fetal deaths at 20+ gestational weeks.

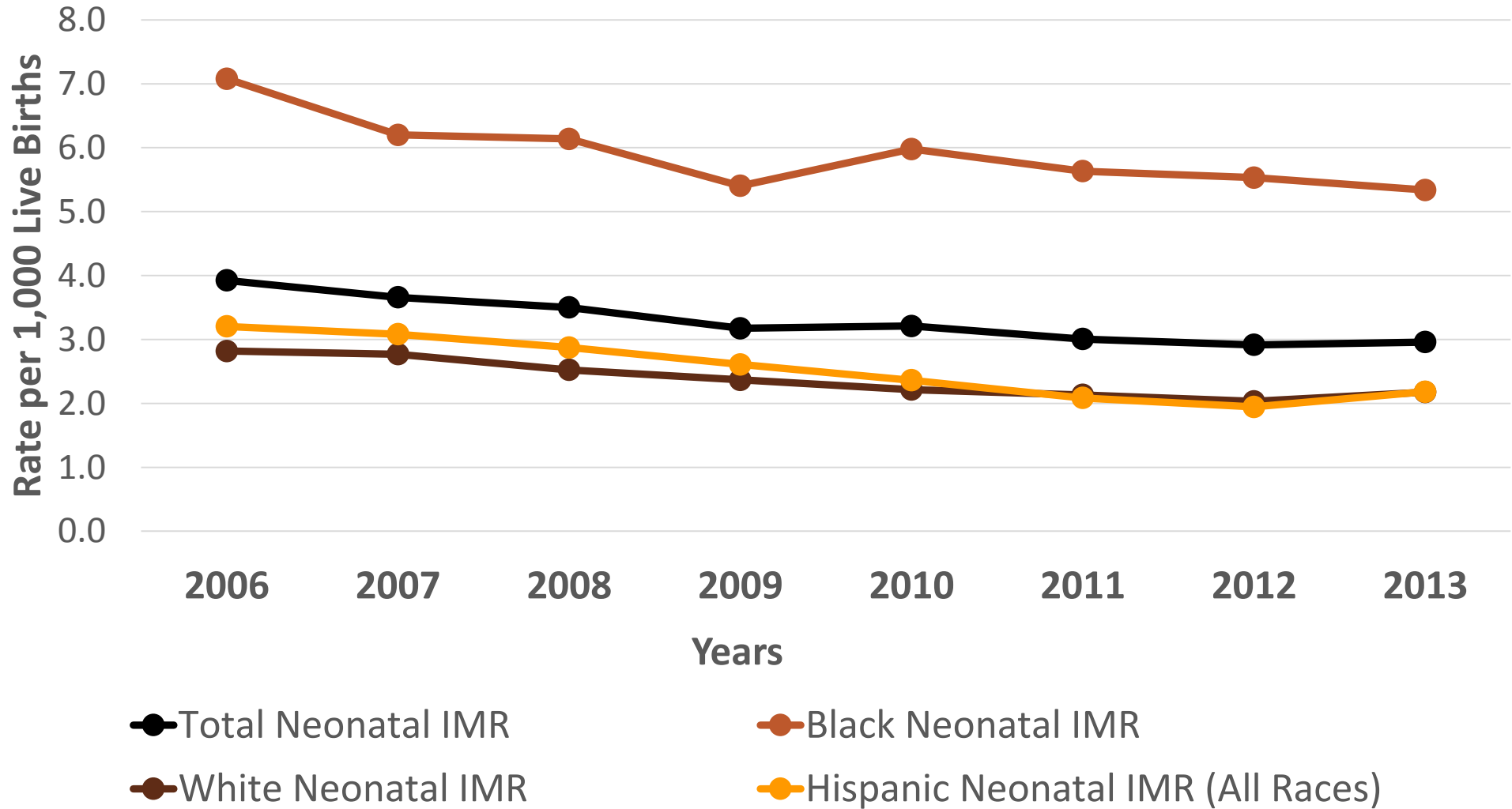


3-Year Fetal Mortality Rates Miami-Dade County, 2005-2014

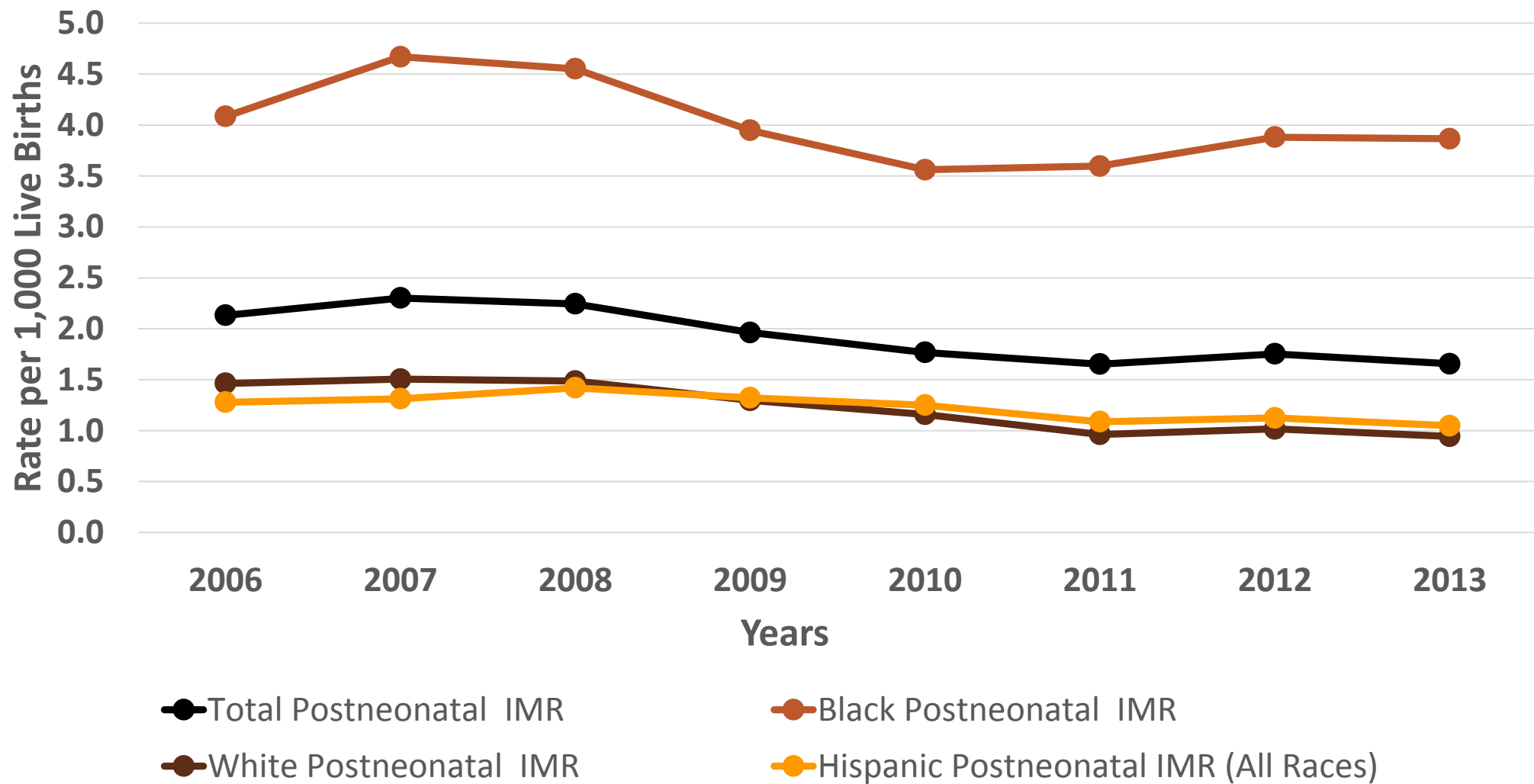


● Total Fetal Death Rate ● Black Fetal Death Rate
● White Fetal Death Rate ● Hispanic Fetal Death Rate

3-Year Neonatal Infant Mortality Rates Miami-Dade County, 2005-2014

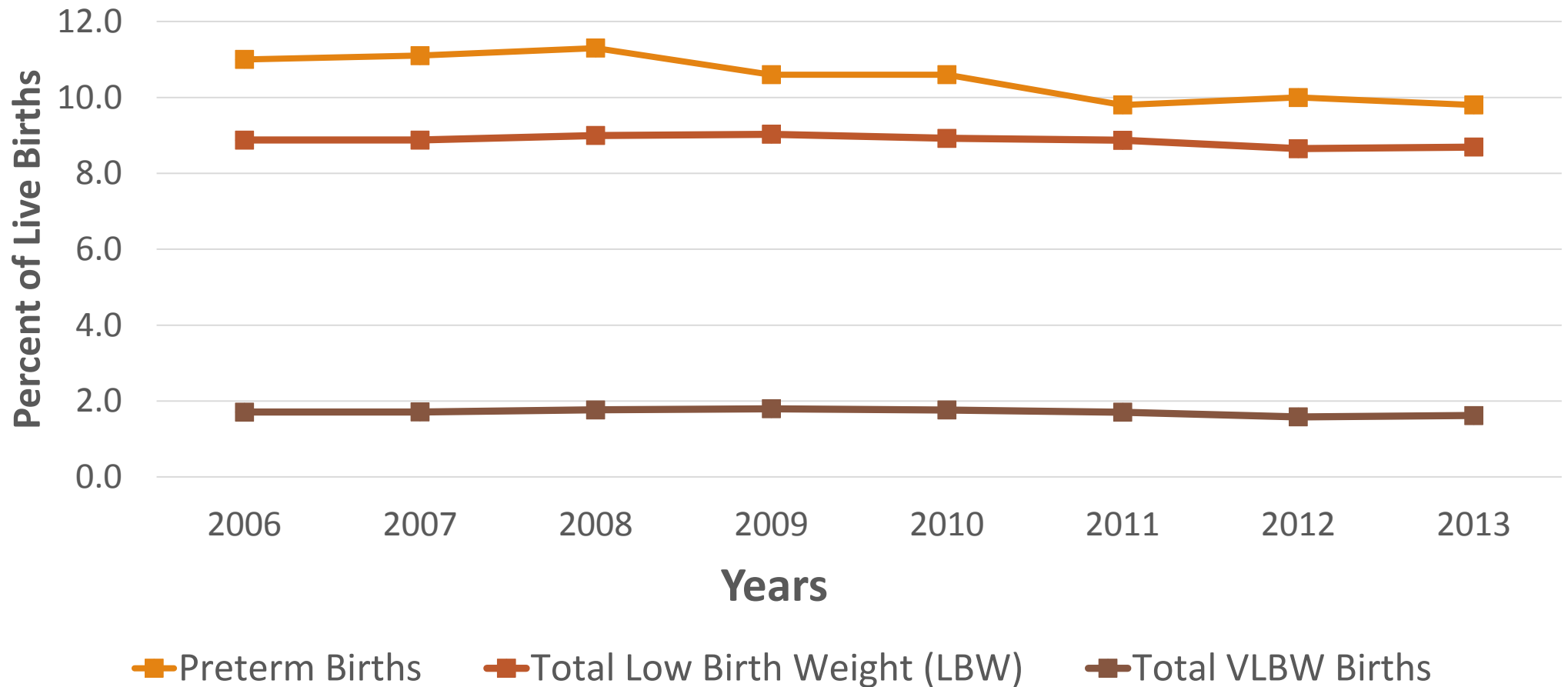


3-Year Postneonatal Infant Mortality Rates Miami-Dade County, 2005-2014



Infant Health Factors

Preterm Births, Low Birth Weight (LBW), and VLBW Births in Miami-Dade County, 2005-2014



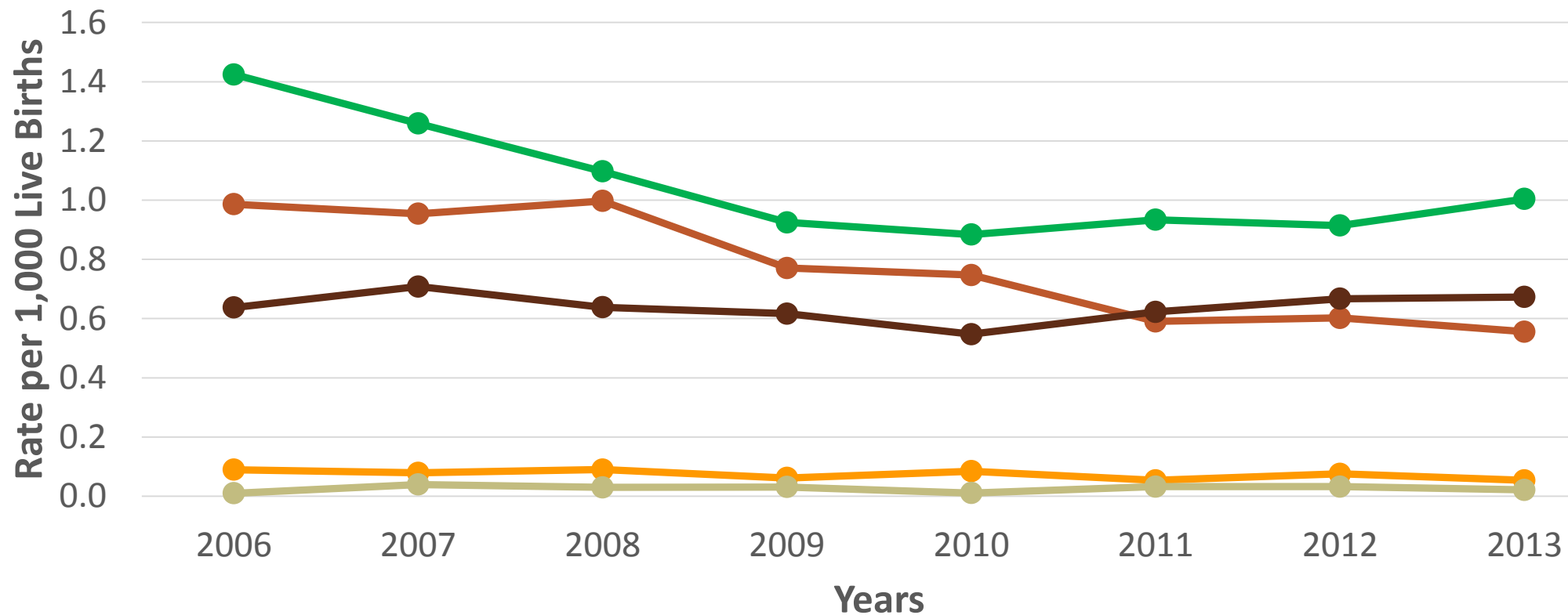
Select Causes of Infant Death

Over the last ten years, the leading causes of Infant Mortality:

1. Congenital Anomaly/Birth Defect
2. Sudden Unexpected Infant Death (SUID)
3. Prematurity/Low Birth Weight
4. Unintentional Injury (non-SUID accidents)
5. Intentional Injury (homicide)

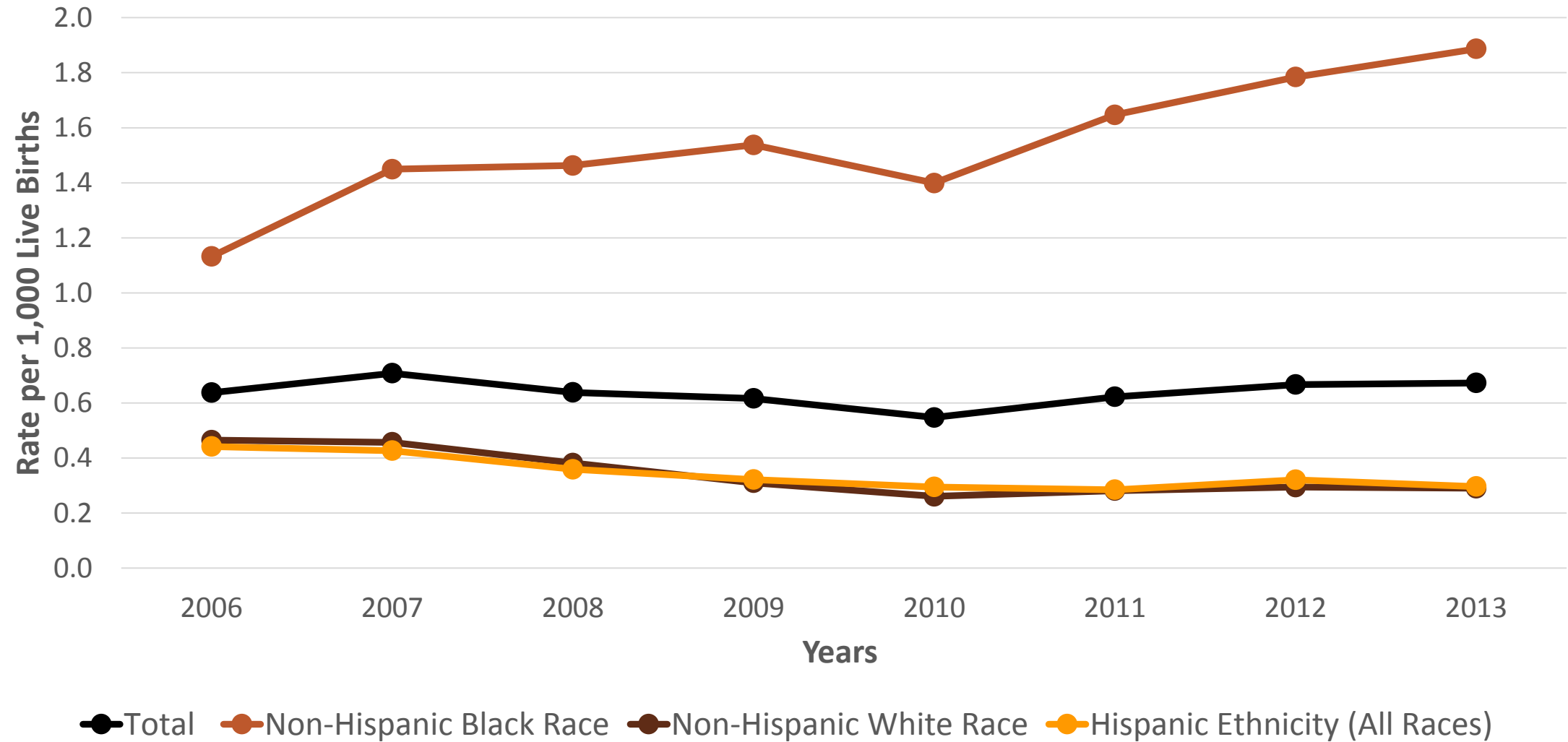


3-Year Cause Specific Infant Mortality Rates Miami-Dade County, 2005-2014



- Congenital Anomaly/Birth Defect
- Prematurity/Low Birth Weight
- Sudden Unexpected Infant Death (SUID)
- Unintentional Injury (non-SUID accidents)
- Intentional Injury (homicide)

Sudden Unexpected Infant Death (SUID) in Miami-Dade County, 2005-2014

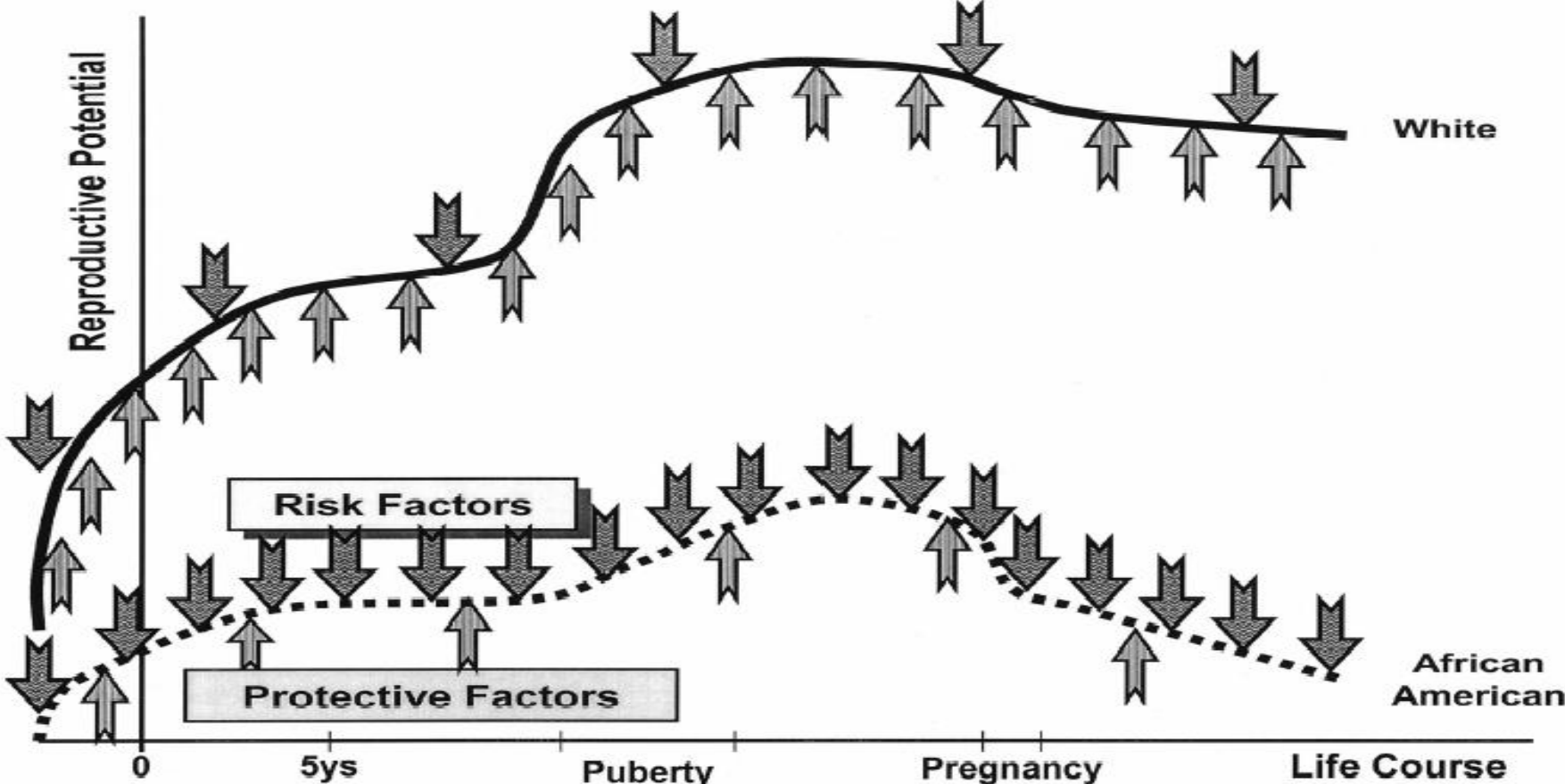


Maternal Health Factors

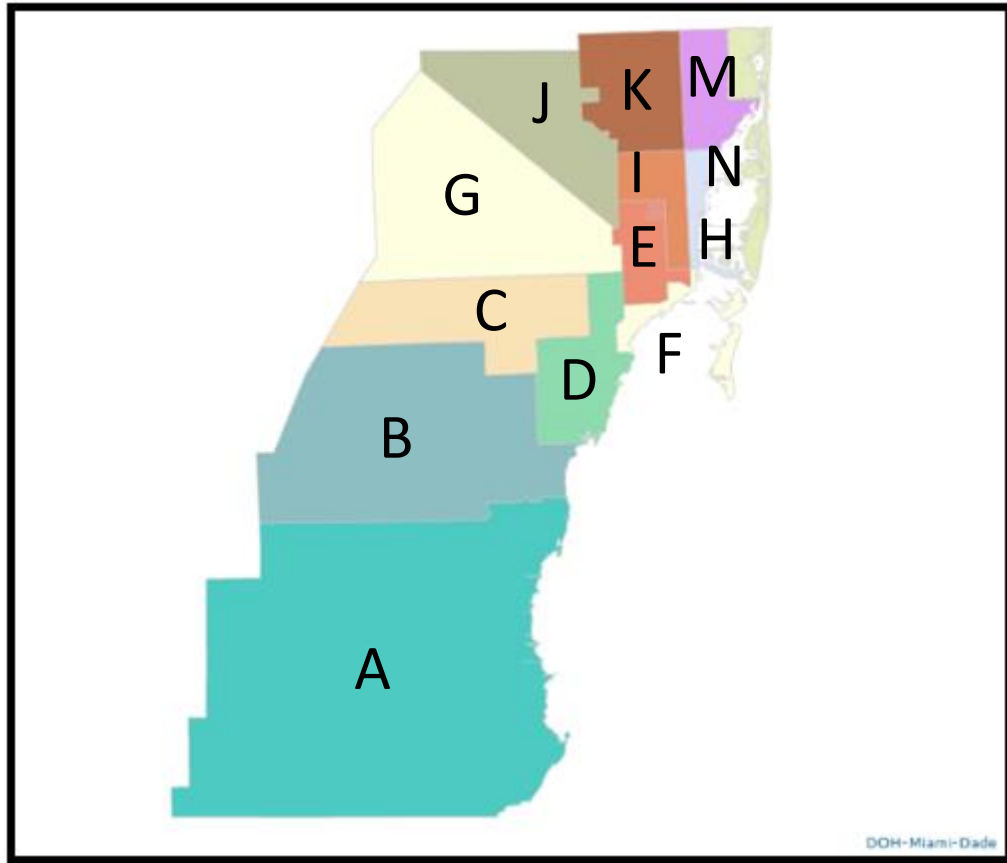
Covered in a later presentation



Life Course Perspective



Neighborhood Area Analysis



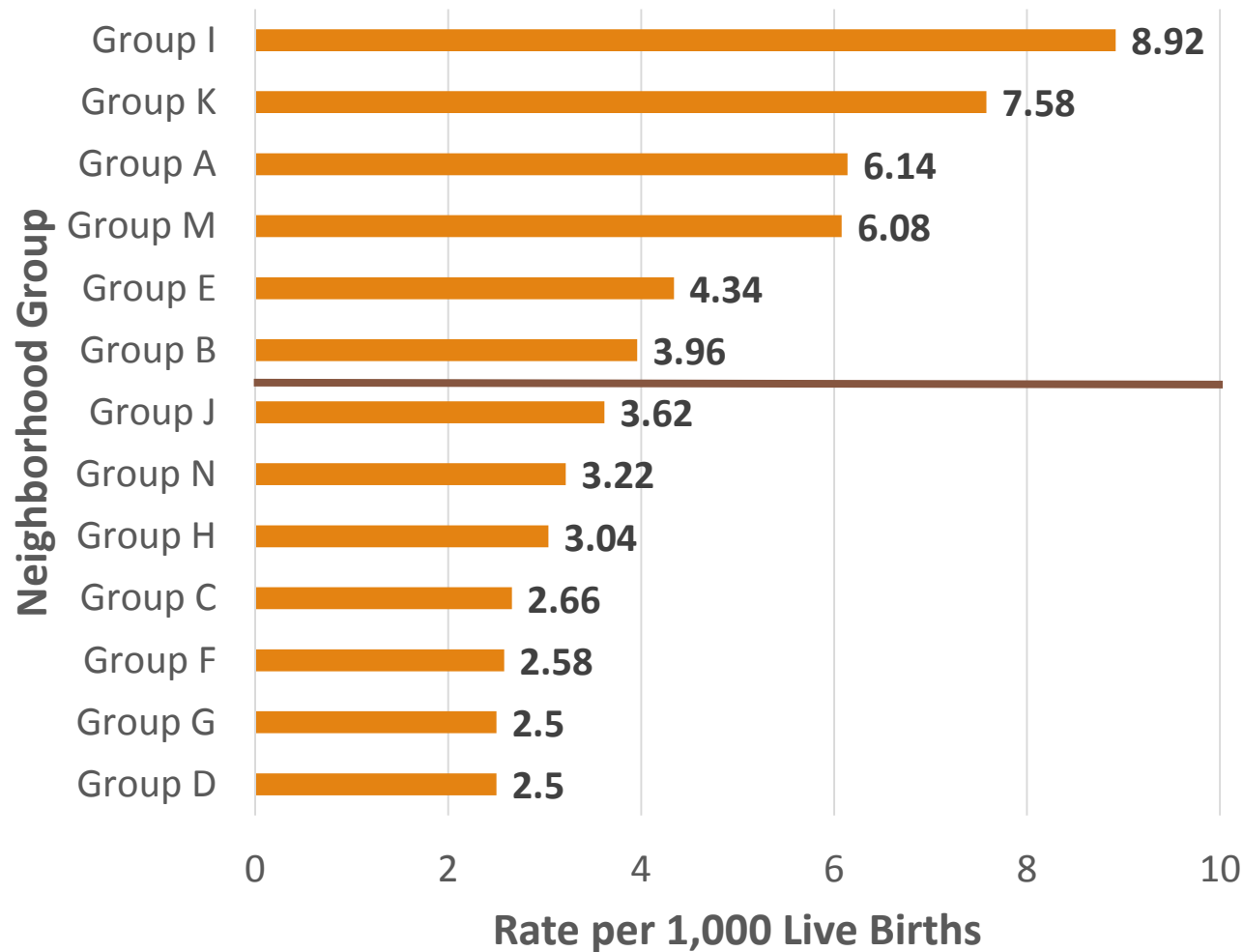
Group	Area	Group	Area
A	South Dade/Homestead	H	Miami Shores/Morningside
B	Kendall	I	Downtown/East Little Havana/ Liberty City/Little Haiti/Overtown
C	Westchester/West Dade	J	Hialeah/Miami Lakes
D	Coral Gables/Kendall	K	Opa-Locka/Miami Gardens/Westview
E	Brownsville/Coral Gables/ Coconut Grove	M	North Miami/North Miami Beach
F	Coral Gables/Coconut Grove/ Key Biscayne	N	Aventura/Miami Beach
G	Doral/Miami/Springs/Sunset		

Infant Mortality Rate

Highest Neighborhood Rates:

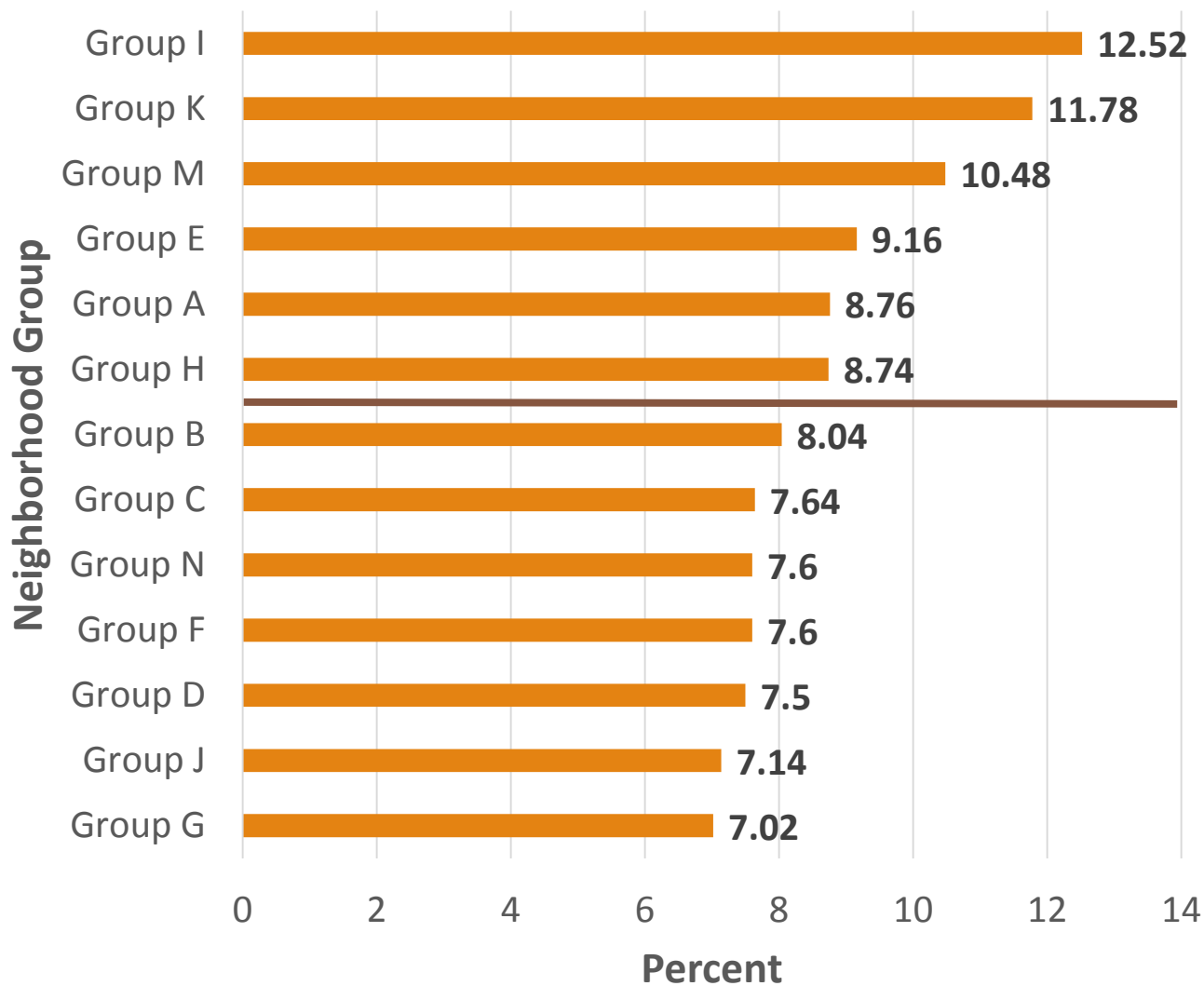
- **Group I:** Downtown/East Little Havana /Liberty City/Little Haiti/Overtown
- **Group K:** Opa-Locka/Miami Gardens /Westview
- **Group A:** South Dade/Homestead
- **Group M:** North Miami/North Miami Beach
- **Group E:** Brownsville/Coral Gables /Coconut Grove
- **Group B:** Kendall

5-Year Infant Mortality Rate by Neighborhood
Miami-Dade County, 2010-2014



Low Birthweight

5-Year Low Birthweight Percentages by Neighborhood, Miami-Dade County, 2010-2014

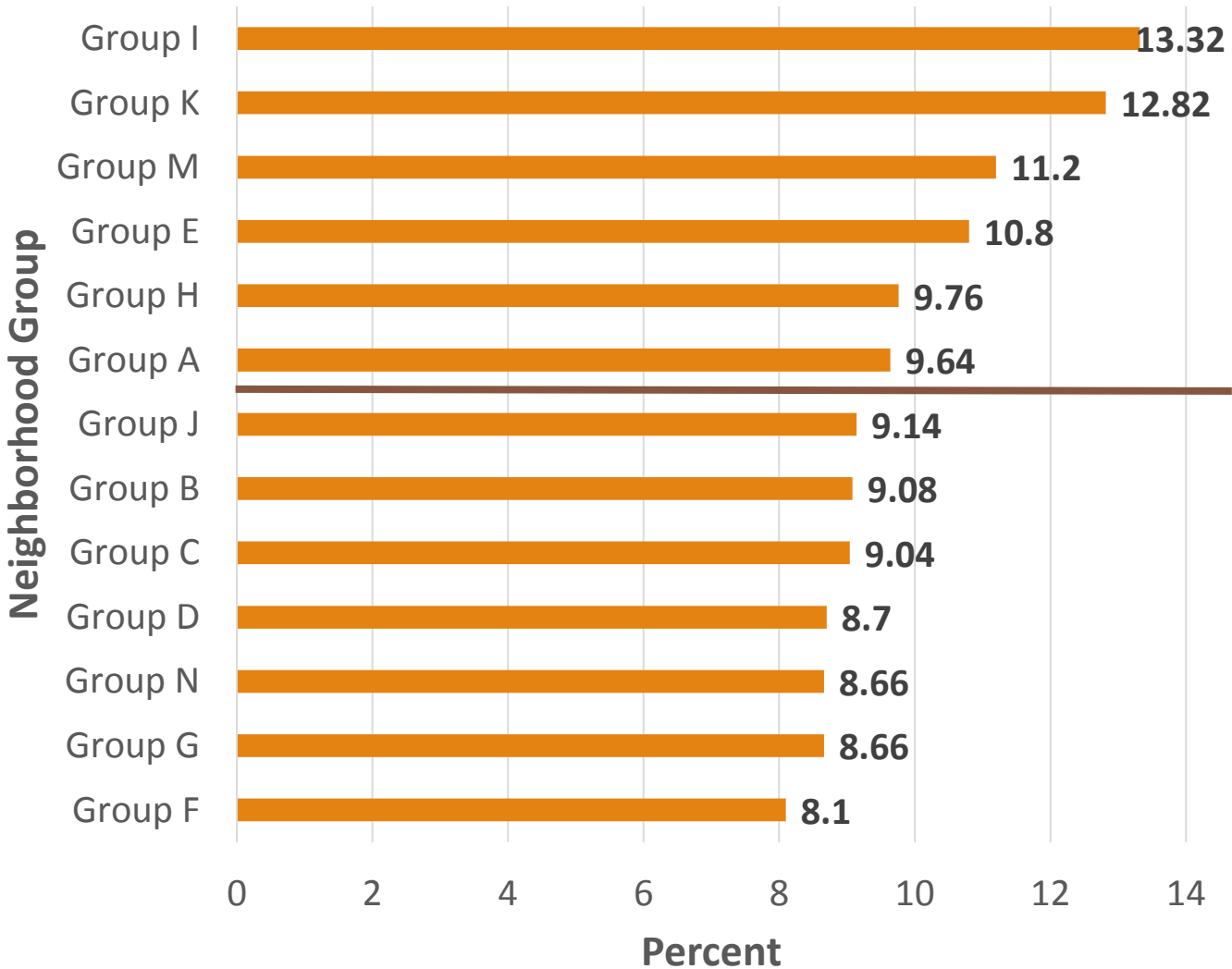


Highest Neighborhood Percentages:

- **Group I:** Downtown/East Little Havana /Liberty City/Little Haiti/Overtown
- **Group K:** Opa-Locka/Miami Gardens/Westview
- **Group M:** North Miami/North Miami Beach
- **Group E:** Brownsville/Coral Gables/Coconut Grove
- **Group A:** South Dade/Homestead
- **Group H:** Miami Shores/Morningside

Preterm Birth

5-Year Preterm Birth Percentages by Neighborhood, Miami-Dade County, 2010-2014



Highest Neighborhood Percentages:

- **Group I:** Downtown/East Little Havana /Liberty City/Little Haiti/Overtown
- **Group K:** Opa-Locka/Miami Gardens/Westview
- **Group M:** North Miami/North Miami Beach
- **Group E:** Brownsville/Coral Gables /Coconut Grove
- **Group H:** Miami Shores/Morningside
- **Group A:** South Dade/Homestead

Summary of Neighborhood Findings: Maternal and Child Health Outcomes

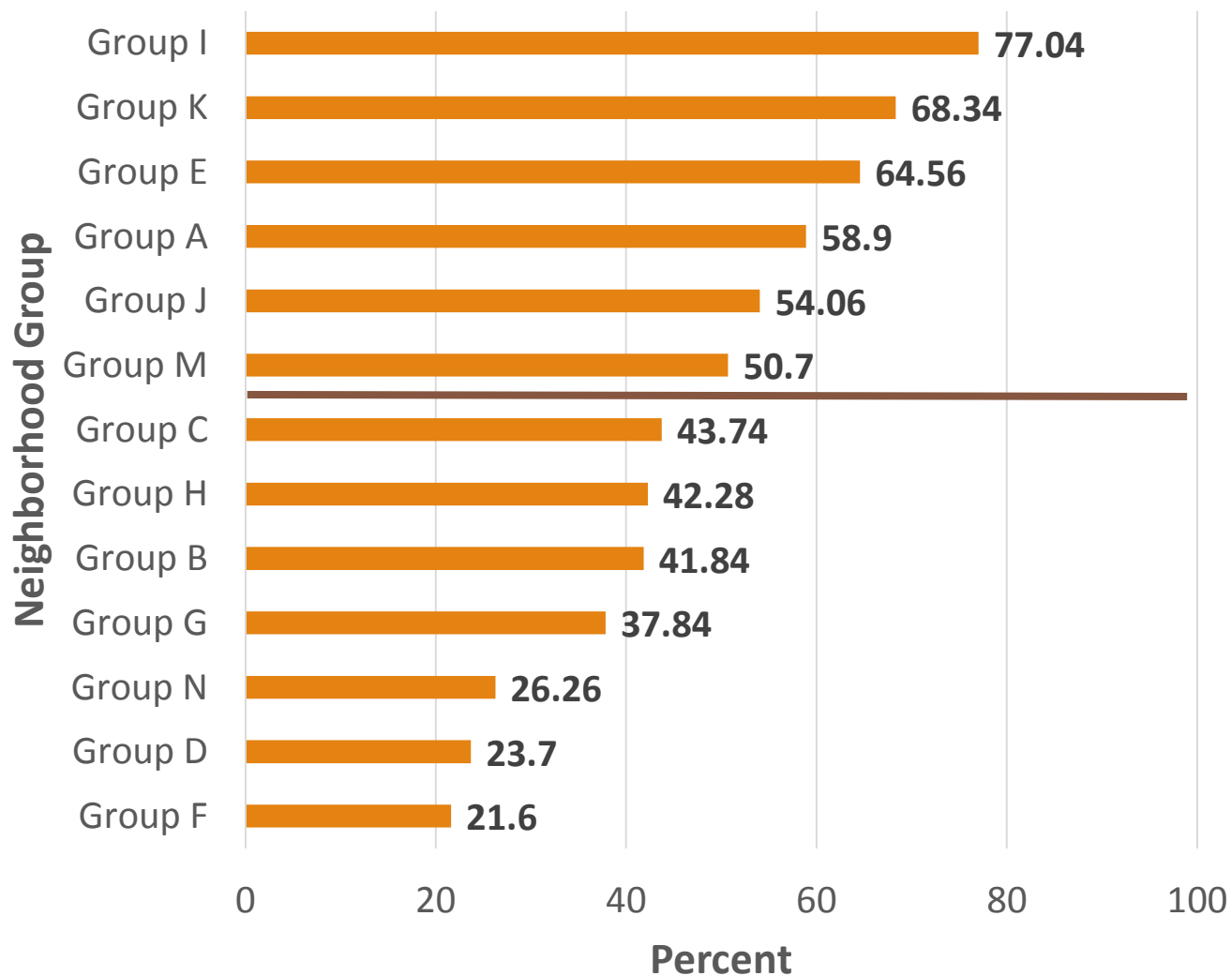
	Grp A	Grp B	Grp C	Grp D	Grp E	Grp F	Grp G	Grp H	Grp I	Grp J	Grp K	Grp M	Grp N
High Infant Mortality Rate	X	X			X				X		X	X	
High % of Low Birth Weight	X				X			X	X		X	X	
High % of Preterm Births	X				X			X	X		X	X	

Highest Neighborhood Rates and Percentages

- **Group A:** South Dade/Homestead
- **Group B:** Kendall
- **Group E:** Brownsville/Coral Gables/Coconut Grove
- **Group H:** Miami Shores/Morningside
- **Group I:** Downtown/East Little Havana/Liberty City/Little Haiti/Overtown
- **Group K:** Opa-Locka/Miami Gardens/Westview
- **Group M:** North Miami/North Miami Beach

Unwed Mothers

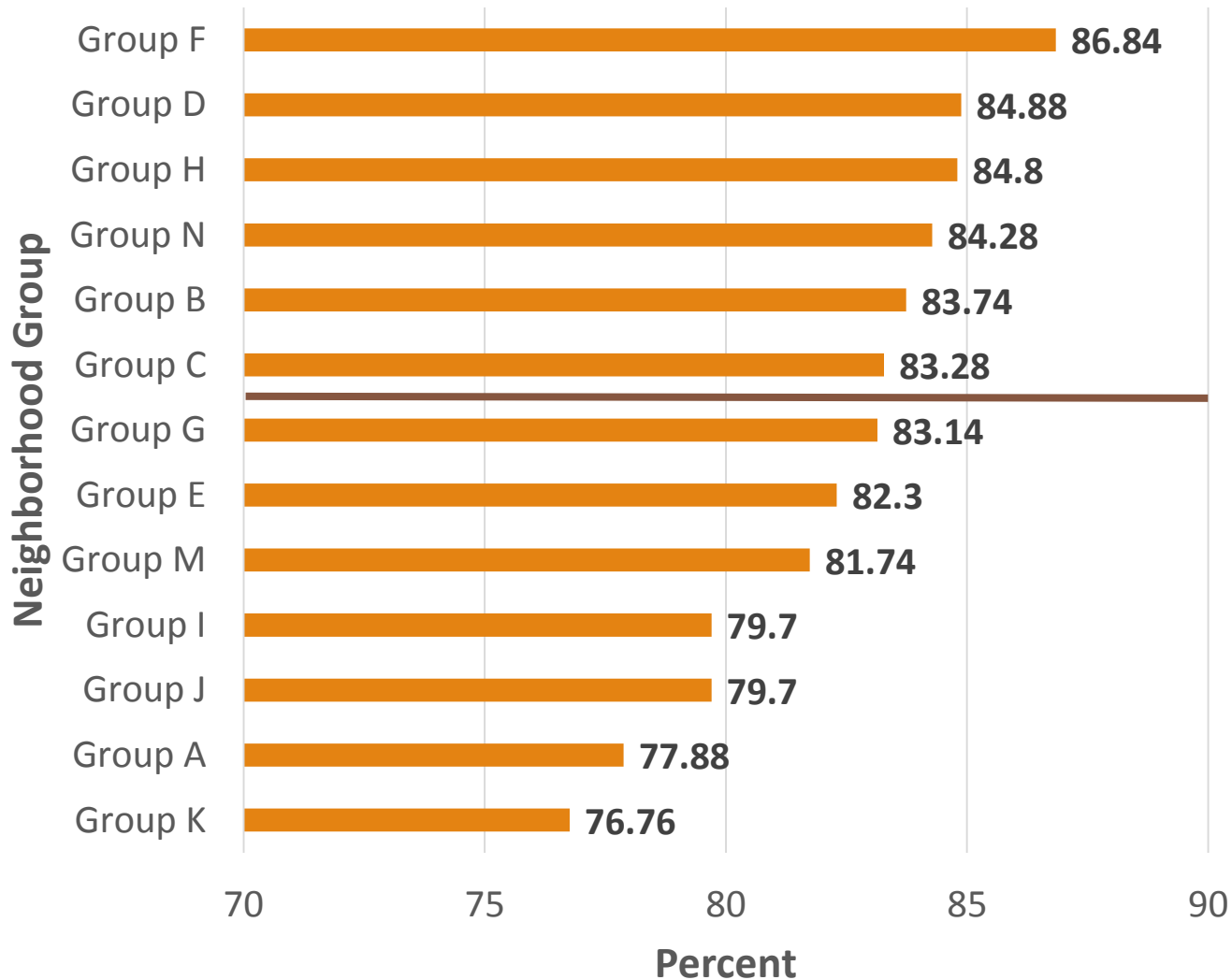
5-Year Percent of Unwed Mothers by Neighborhood, Miami-Dade County, 2010-2014



Highest Neighborhood Percentages:

- **Group I:** Downtown/East Little Havana/ Liberty City/Little Haiti/Overtown
- **Group K:** Opa-Locka/Miami Gardens /Westview
- **Group E:** Brownsville/Coral Gables /Coconut Grove
- **Group A:** South Dade/Homestead
- **Group J:** Hialeah/Miami Lakes
- **Group M:** North Miami/North Miami Beach

Highest 5-Year Percent of Early Prenatal Care by Neighborhood, Miami-Dade County, 2010-2014



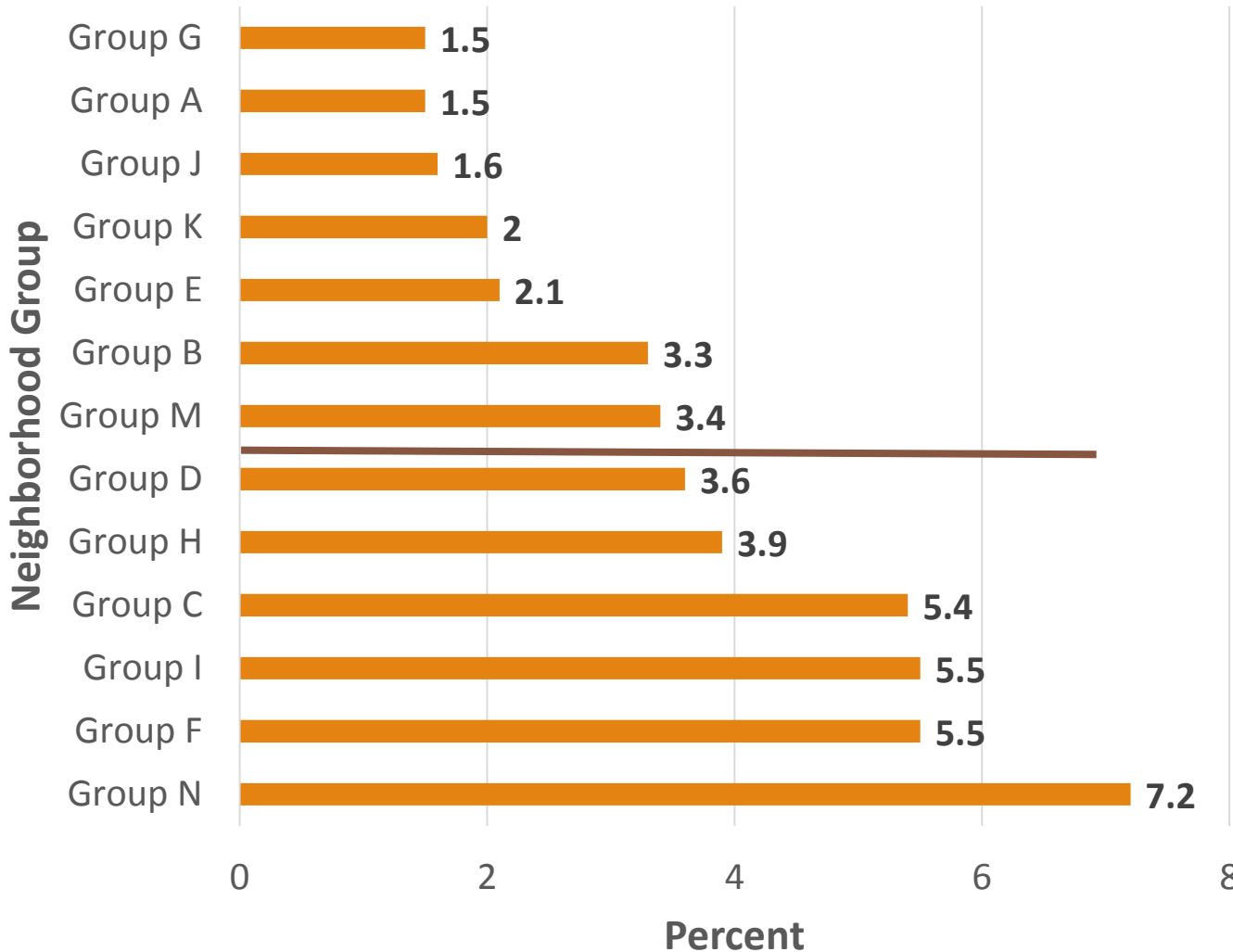
Early Prenatal Care

Lowest Neighborhood Percentages:

- **Group K:** Opa-Locka/Miami Gardens/Westview
- **Group A:** South Dade/Homestead
- **Group J:** Hialeah/Miami Lakes
- **Group I:** Downtown/East Little Havana /Liberty City/Little Haiti/Overtown
- **Group M:** North Miami/North Miami Beach
- **Group E:** Brownsville/Coral Gables /Coconut Grove

Illicit Drug Use

Highest Percent of Illicit Drug Use by Neighborhood Miami-Dade County, 2014



Highest Neighborhood Percentages:

- **Group N:** Aventura/Miami Beach
- **Group F:** Coral Gables/Coconut Grove /Key Biscayne
- **Group I:** Downtown/East Little Havana /Liberty City/Little Haiti/Overtown
- **Group C:** Westchester/West Dade
- **Group H:** Miami Shores/Morningside
- **Group D:** Coral Gables/Kendall

Summary of Neighborhood Findings: Substance Abuse and Tobacco Use

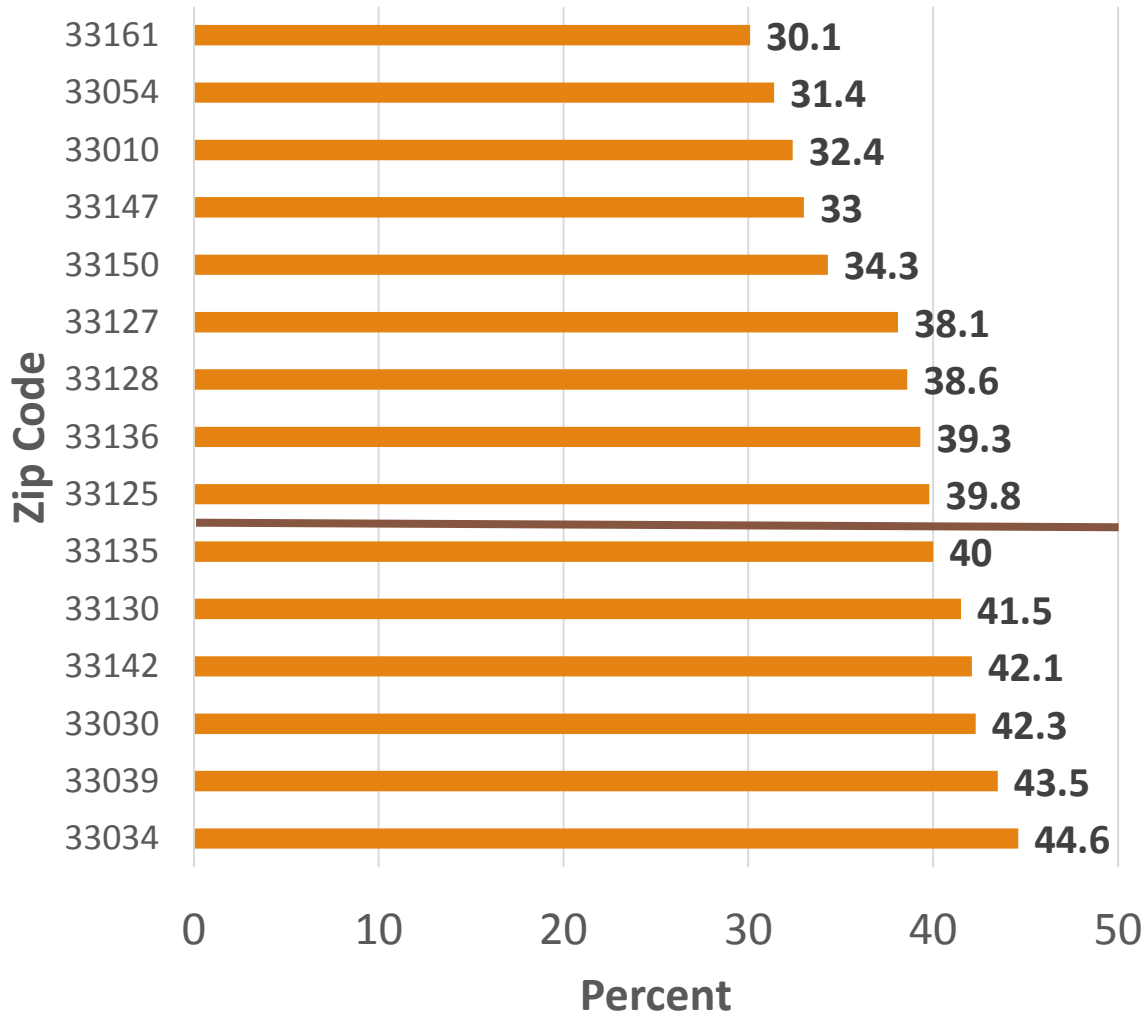
	Grp A	Grp B	Grp C	Grp D	Grp E	Grp F	Grp G	Grp H	Grp I	Grp J	Grp K	Grp M	Grp N
% Current Drinker		X	X	X		X	X						X
% Illicit Drug Use in Past Month			X	X		X		X	X				X
% Current Smoker	X		X		X				X	X			X
% Someone Smokes at home			X		X				X	X	X		X

Highest Neighborhood Percentages

- **Group C:** Westchester/West Dade
- **Group D:** Coral Gables/Kendall
- **Group E:** Brownsville/Coral Gables/Coconut Grove
- **Group F:** Coral Gables/Coconut Grove/Key Biscayne
- **Group H:** Miami Shores/Morningside
- **Group I:** Downtown/East Little Havana/Liberty City/Little Haiti/Overtown
- **Group J:** Hialeah/Miami Lakes
- **Group N:** Aventura/Miami Beach

Poverty

Highest Percent of Poverty by Zip Code Miami-Dade County, 2010-2014

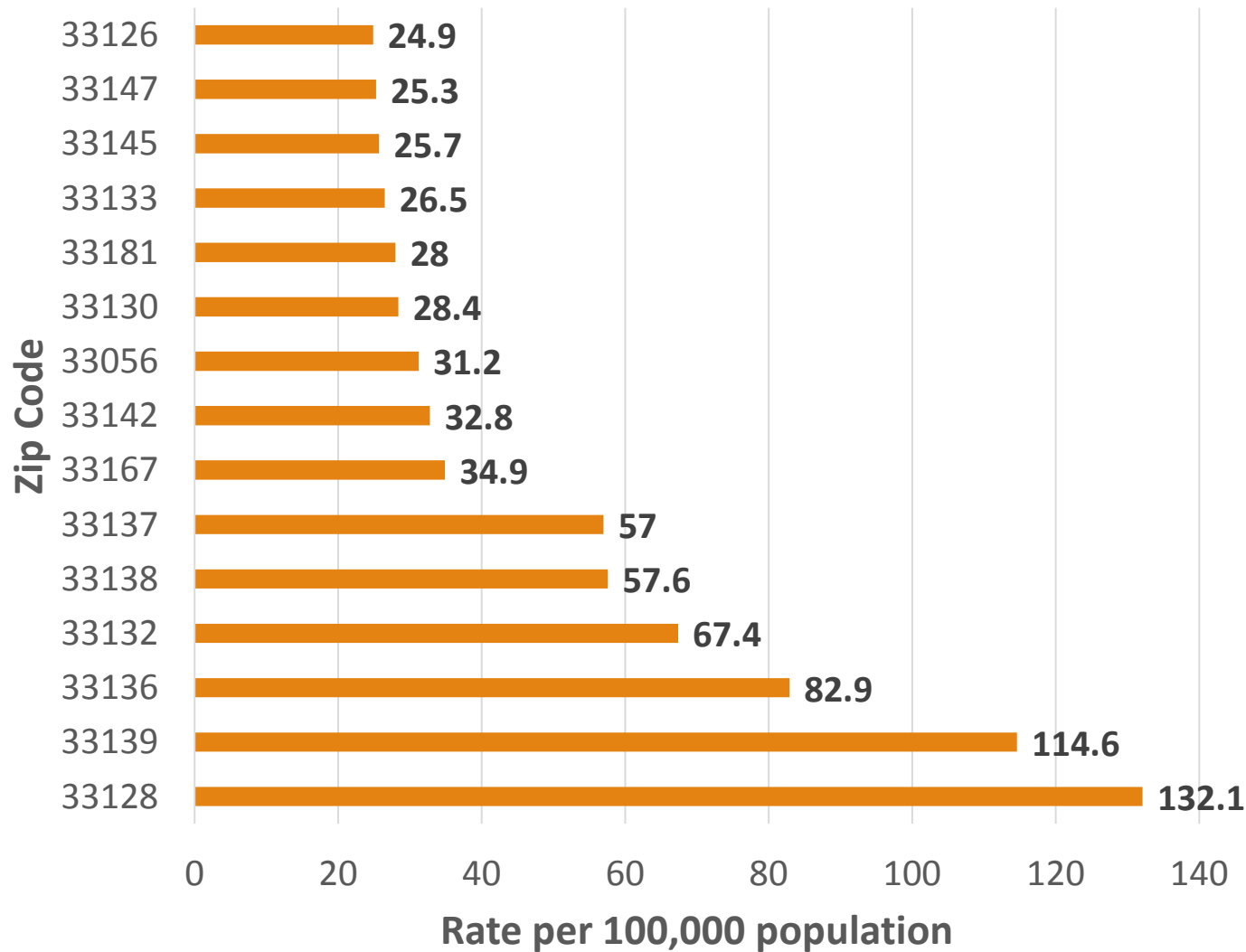


Highest Neighborhood Percentages:

- **Group A:** South Dade/Homestead (33034, 33039, 33030)
- **Group I:** Downtown/East Little Havana/Liberty City/Little Haiti/Overtown (33136, 33128, 33127, 33150, 33147)
- **Group E:** Brownsville/Coral Gables/Coconut Grove (33142, 33130, 33135, 33125)
- **Group K:** Opa-Locka/Miami Gardens /Westview (33034)
- **Group J:** Hialeah/Miami Lakes (33010)
- **Group M:** North Miami/North Miami Beach (33161)

Infectious Syphilis

Highest Infectious Syphilis Rate by Zip Codes Miami-Dade County, 2014

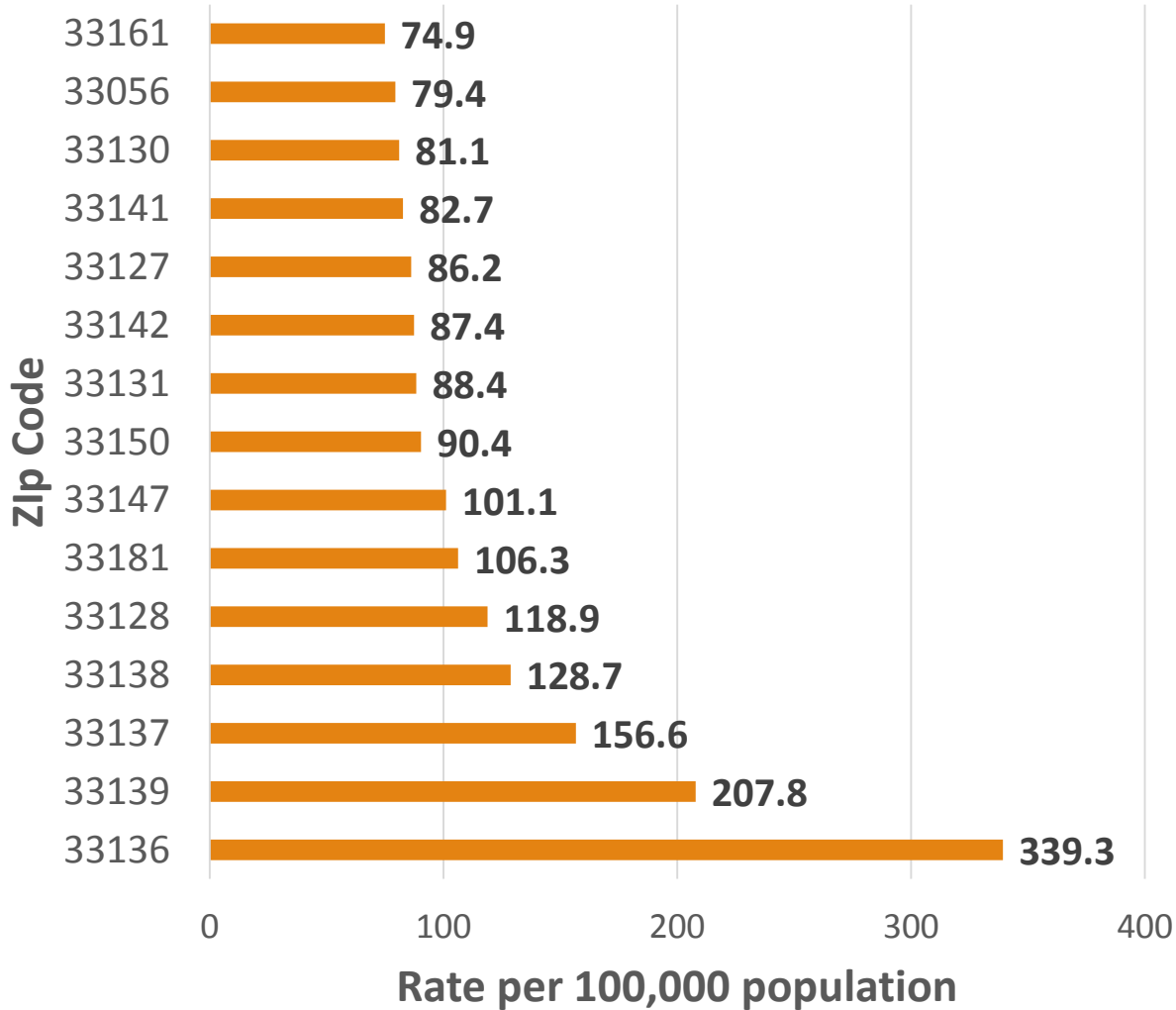


Highest Neighborhood Rates:

- **Group E:** Brownsville/Coral Gables /Coconut Grove (33142, 33130, 33145)
- **Group H:** Miami Shores/Morningside (33034)
- **Group I:** Downtown/East Little Havana /Liberty City/Little Haiti/Overtown (33010)
- **Group K:** Opa-Locka/Miami Gardens /Westview (33167, 33056)
- **Group M:** North Miami/North Miami Beach (33181)
- **Group N:** Aventura/Miami Beach (33139)

HIV Rates

Highest Reported HIV Rate by Zip Code
Miami-Dade County, 2014



Highest Neighborhood Rates:

- **Group E:** Brownsville/Coral Gables /Coconut Grove (33142, 33130, 33145)
- **Group H:** Miami Shores/Morningside (33137, 33138)
- **Group I:** Downtown/East Little Havana /Liberty City/Little Haiti/Overtown (33136, 33128, 33147, 33150, 33127)
- **Group K:** Opa-Locka/Miami Gardens /Westview (33056)
- **Group M:** North Miami/North Miami Beach (33181, 33161)
- **Group N:** Aventura/Miami Beach (33139, 33141)

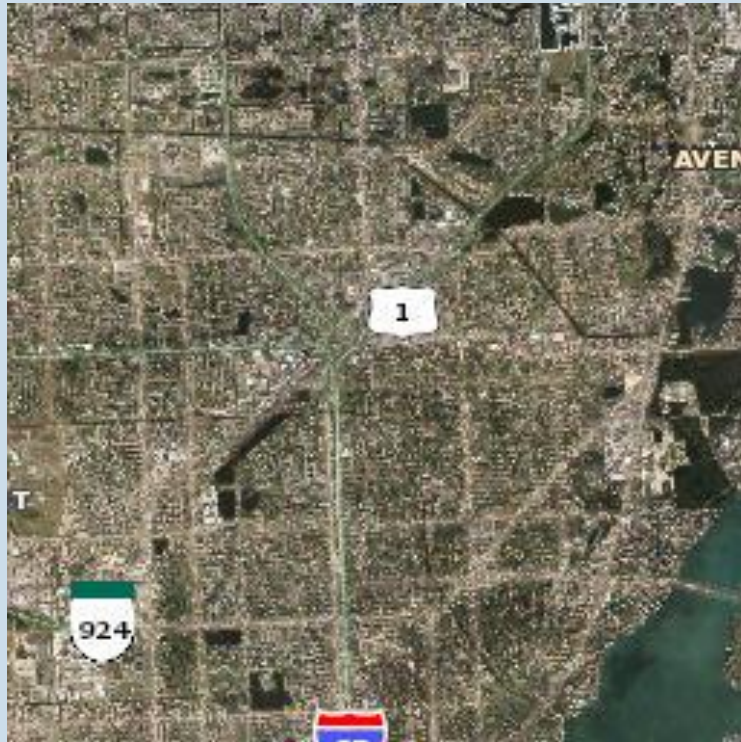
Summary of Neighborhood Findings: Sexually Transmitted Diseases

	Grp A	Grp B	Grp C	Grp D	Grp E	Grp F	Grp G	Grp H	Grp I	Grp J	Grp K	Grp M	Grp N
Syphilis Rate					X			X	X		X	X	X
Gonorrhea Rate	X				X			X	X		X		X
Chlamydia Rate					X			X	X		X	X	X
HIV Rate					X			X	X		X	X	X
AIDS Rate			X		X			X	X		X	X	X

Highest Neighborhood Rates:

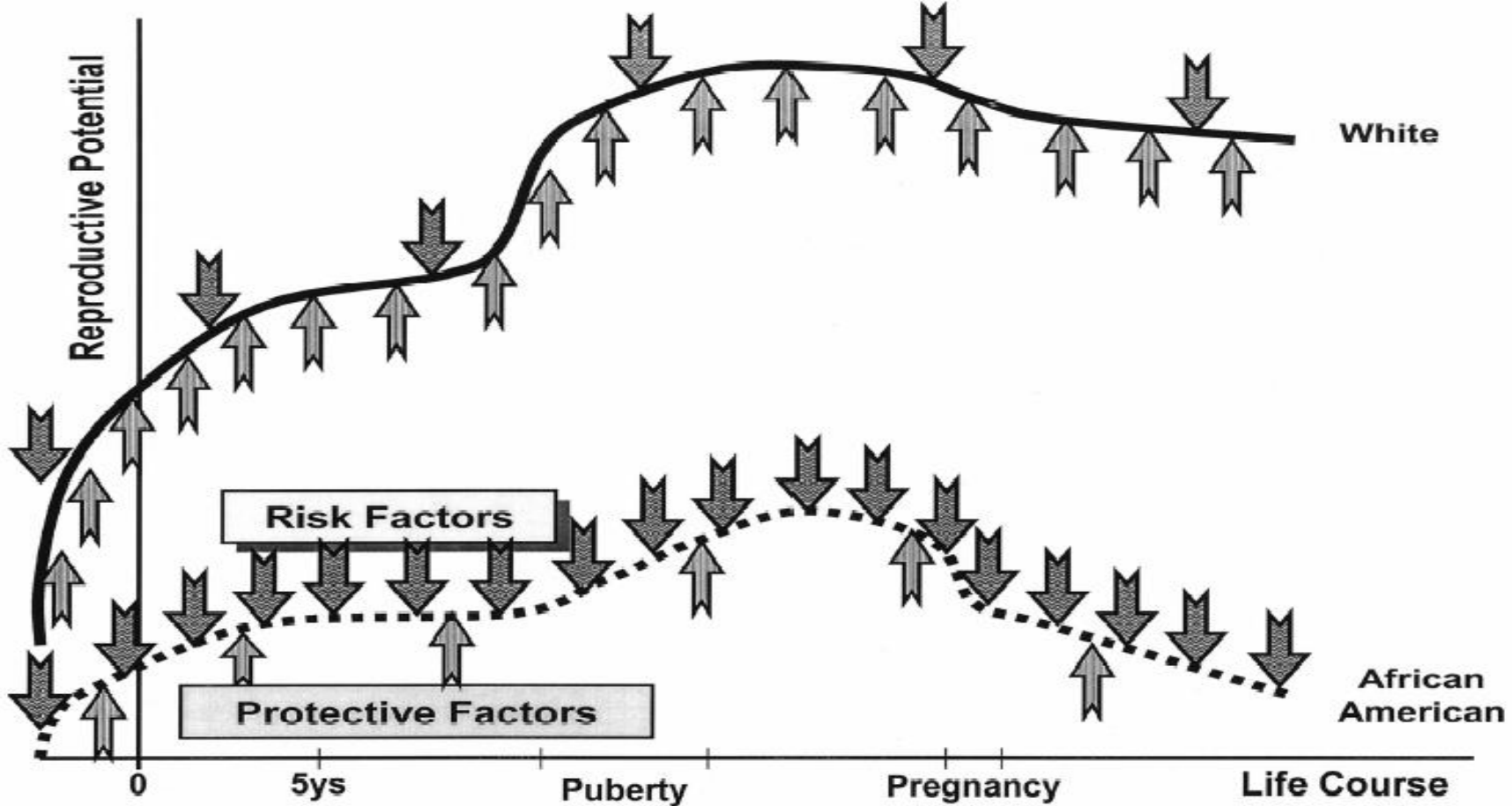
- **Group E** - Brownsville/Coral Gables/Coconut Grove
- **Group H** - Miami Shores/Morningside
- **Group I** - Downtown/East Little Havana/Liberty City/Little Haiti/Overtown
- **Group K** - Opa-Locka/Miami Gardens/Westview
- **Group M** - North Miami/North Miami Beach
- **Group N** - Aventura/Miami Beach

Initial Conclusions



Neighborhoods with increasing social disadvantage correlated with areas with high infant mortality rates and other adverse birth outcomes.

Life Course Perspective



Questions?

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