

Best Practices in Prevention of Fetal Death



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Best Practices in Prevention of Fetal Death

Learning Objectives

- **At the conclusion of the presentation, the participant will be able to:**
 - **Understand the difference between fetal and infant death**
 - **Understand the racial gap in fetal and infant deaths**
 - **Describe causes of infant mortality in Sarasota County**
 - **Describe a pilot project to reduce infant mortality in Sarasota County**

Definitions

Live birth is a baby born with signs of life regardless of birthweight and gestational age.

Fetal death is a baby born without signs of life of at least of 20 weeks gestational age.

Infant death is a death of a baby during the first year of life.



3600 Live Births-2007

“One of America’s Best Hospitals”
– *U.S. News & World Report*

**SARASOTA
MEMORIAL**
HEALTH CARE SYSTEM  [®]

Definitions

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Fetal death is a baby born without signs of life of at least 20 weeks gestational age.

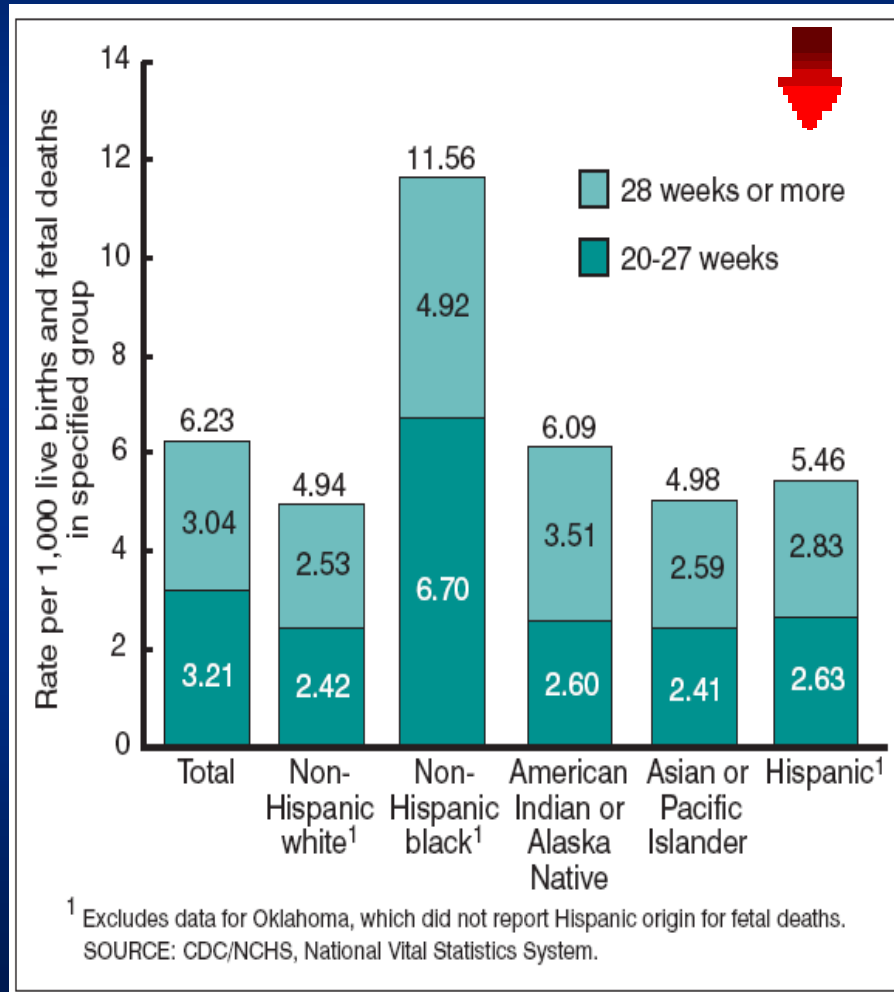
Infant death is a death of a baby during the first year of life.

What Is The Fetal Death Rate?

- United States- 2003
 - 6.23 per 1000 births
- Florida- 2005
 - 7.4 per 1000 births



National Fetal Death Rates By Race And Ethnicity



- 11.56 fetal deaths per 1000 births in Black population
- 4.94 fetal deaths per 1000 births in White population

Figure 1: National Fetal mortality rates by race and ethnicity in 2003

Sarasota County Fetal Death Rates By Race And Ethnicity

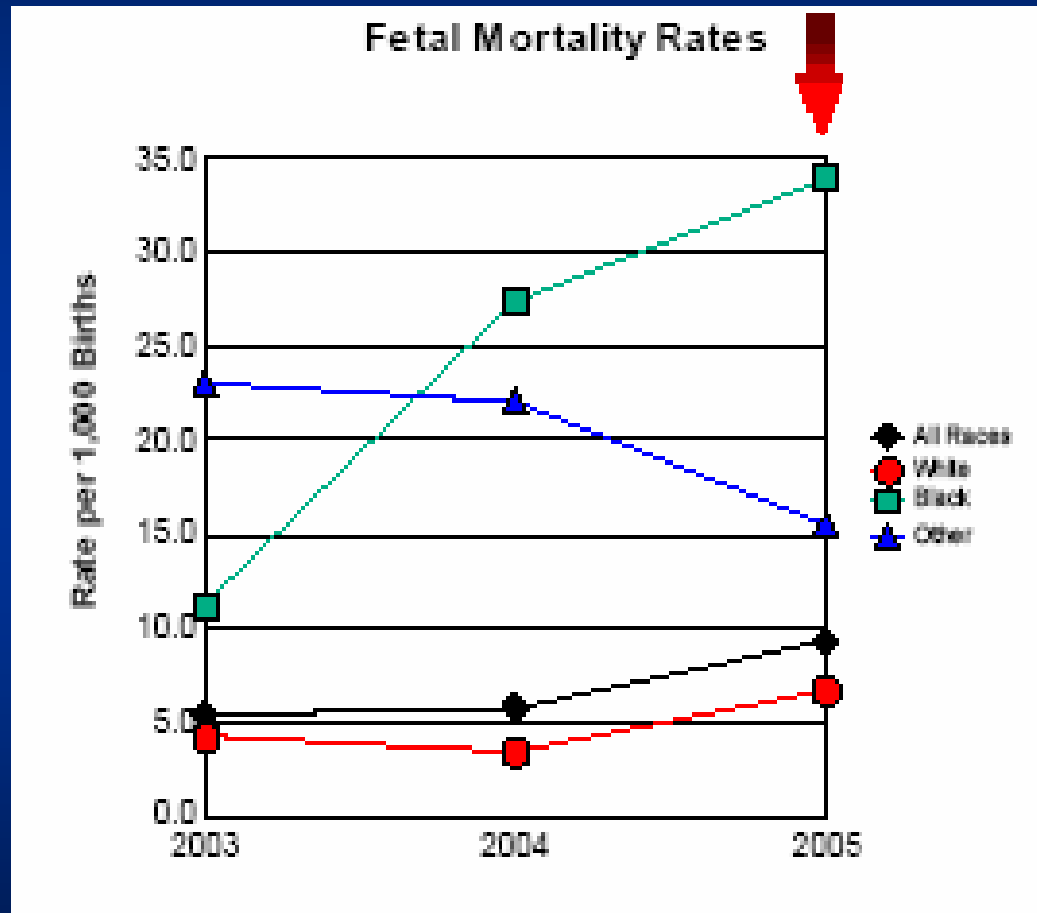
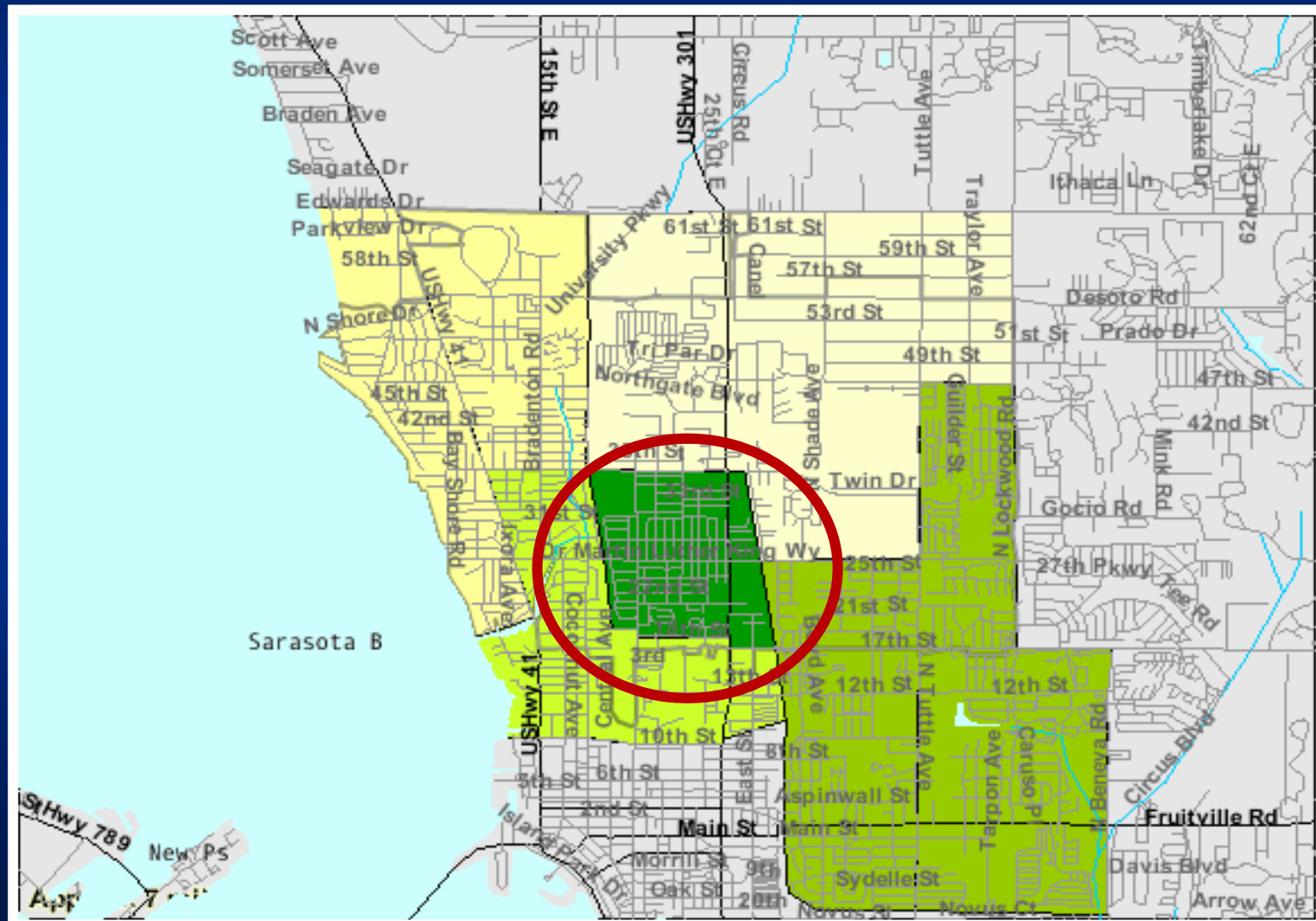


Figure 2: Fetal Mortality Rates 2003-2005 for Sarasota County

- 33.9 fetal deaths per 1000 births in the African American population in Sarasota county
- Increase from previous years
- 6.8 fetal deaths per 1000 Caucasian births in Sarasota county

The Area of Concern

Zip Code 34234



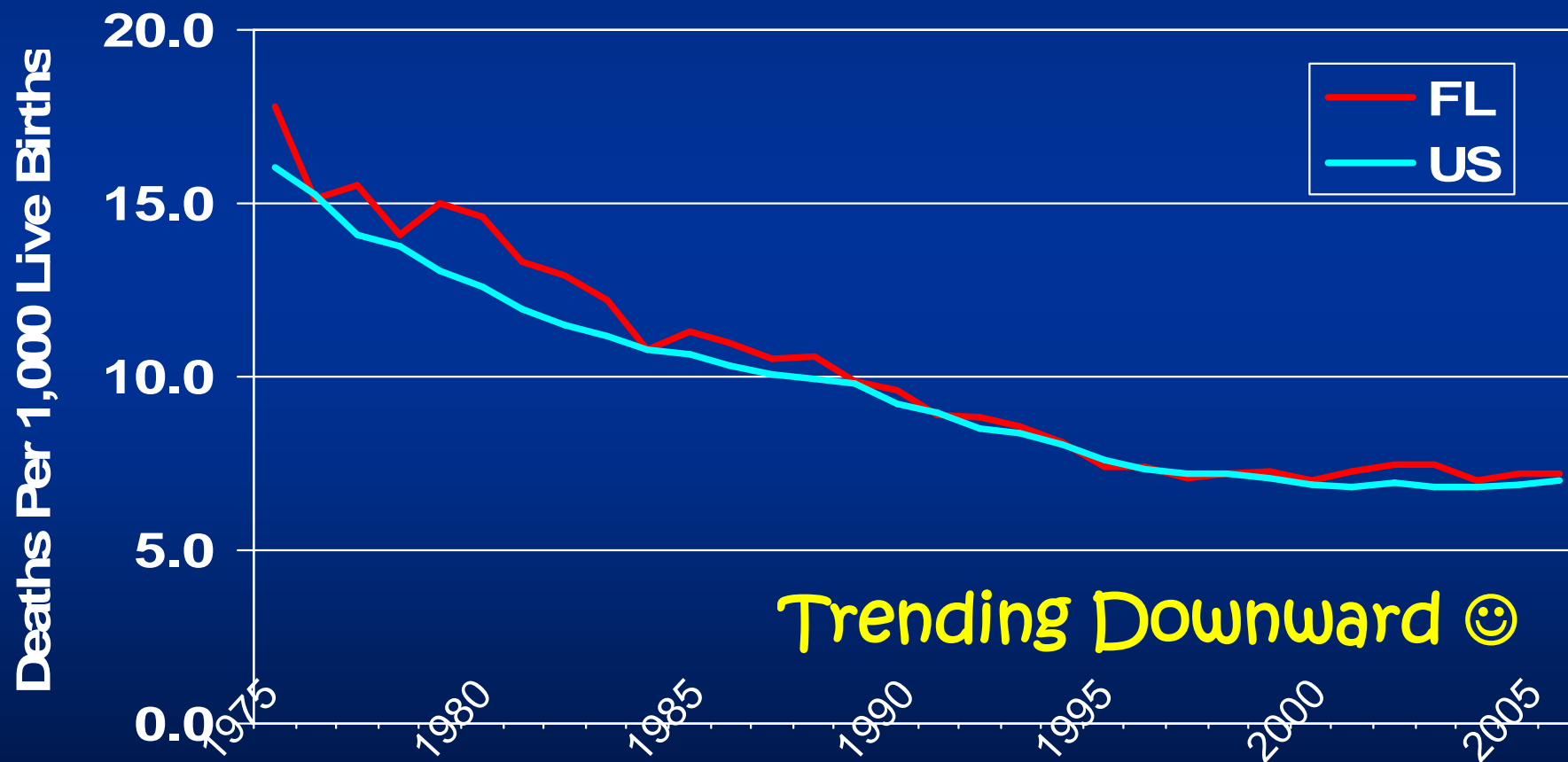
Definitions

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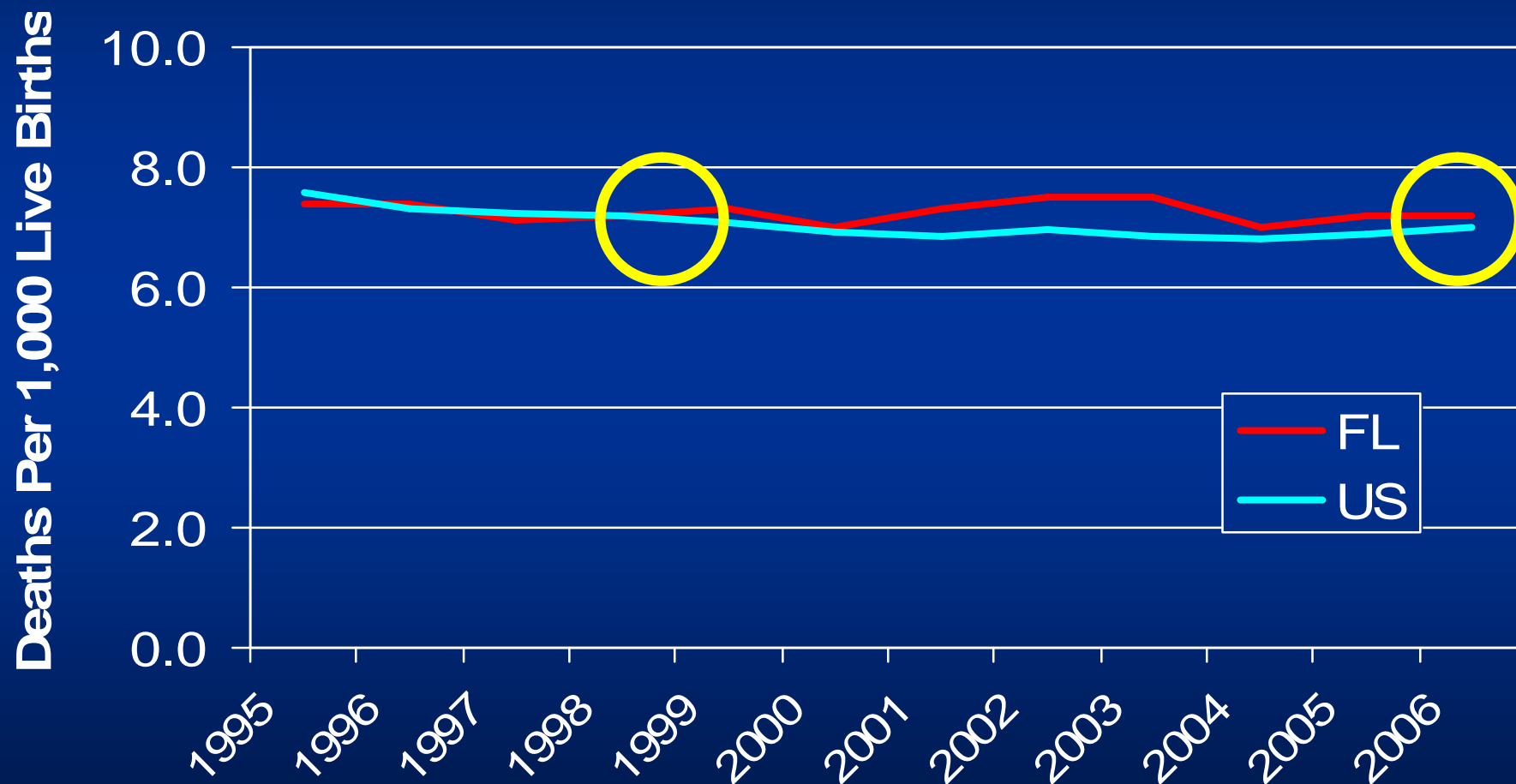
Fetal death is a baby born without signs of life of at least of 20 weeks gestational age.

Infant mortality or death is a death of a baby during the first year of life.

Infant Mortality Rates Florida and U.S., 1975 to 2006



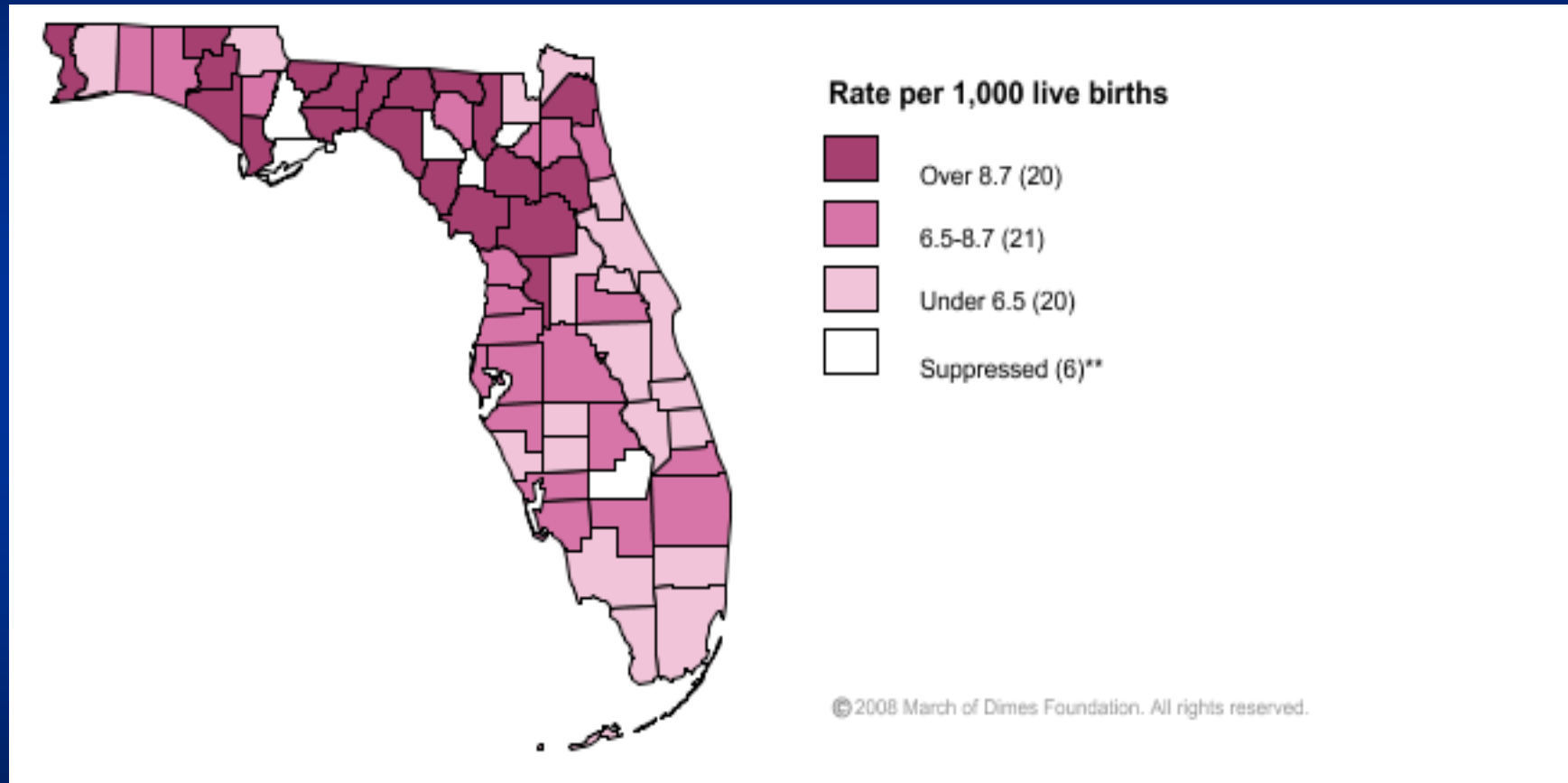
Infant Mortality Rates Florida and U.S., 1995 to 2006



Source: FDOH CHARTS & NCHS Reports

Florida Infant Mortality Rates

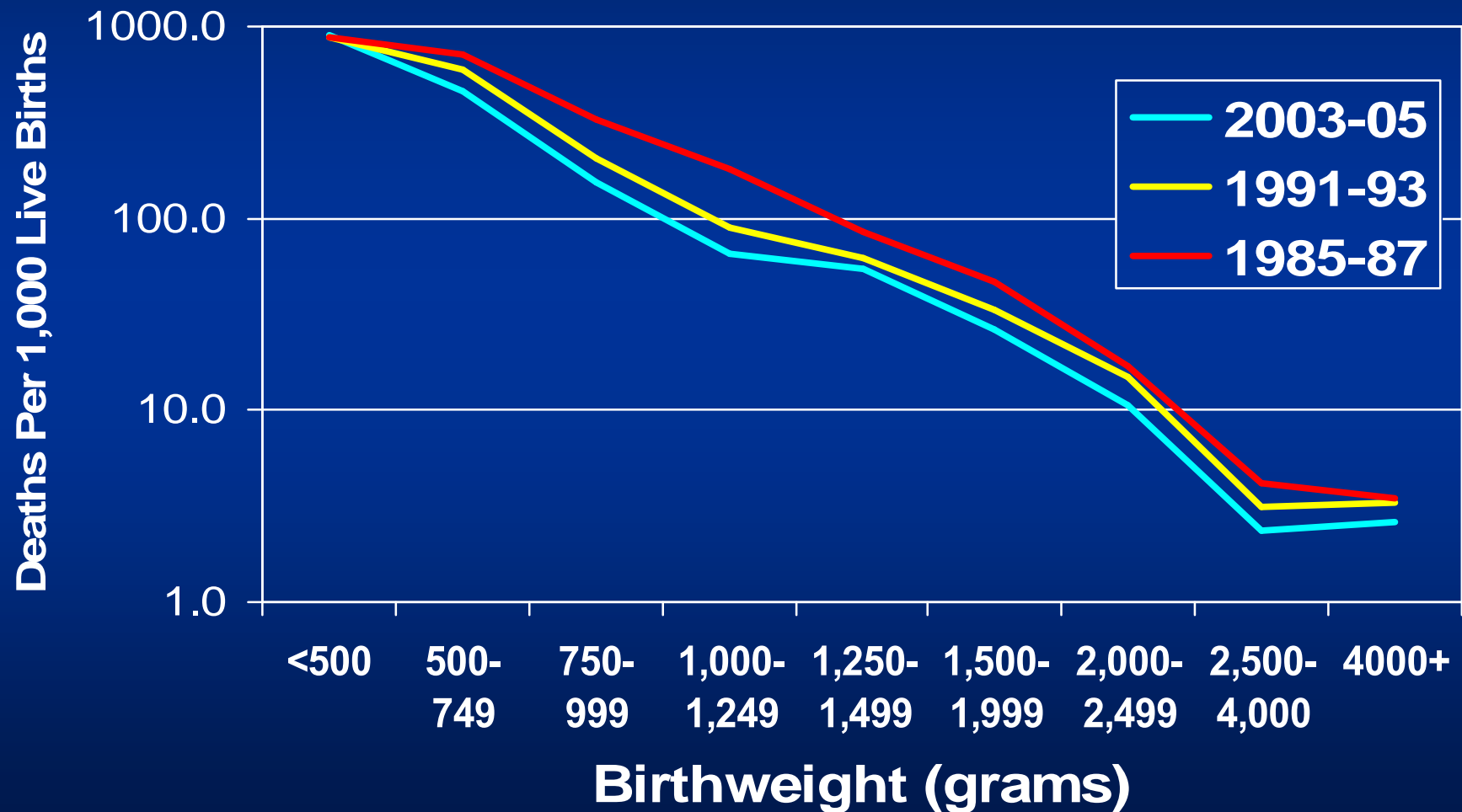
Florida, 2001-2004 Average



An infant death occurs within the first year of life. ** Indicates less than five events or missing data. Not able to calculate a reliable rate.

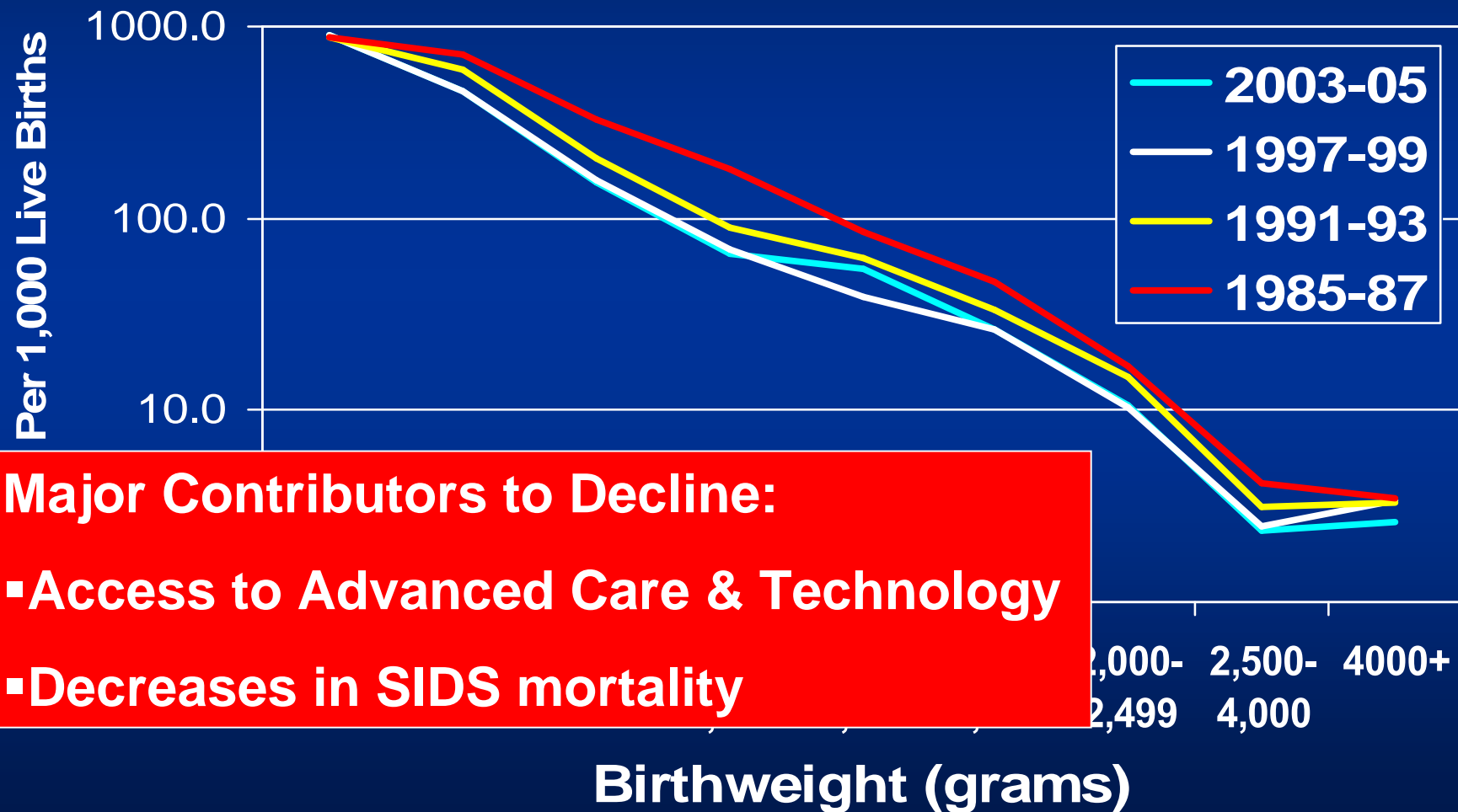
Source: National Center for Health Statistics, final mortality data, 1990-1994 and period linked birth/infant death data, 1995-present. Retrieved March 17, 2008, from www.marchofdimes.com/peristats.

3-Year Infant Mortality Rates Florida, 1985-87 to 2003-05

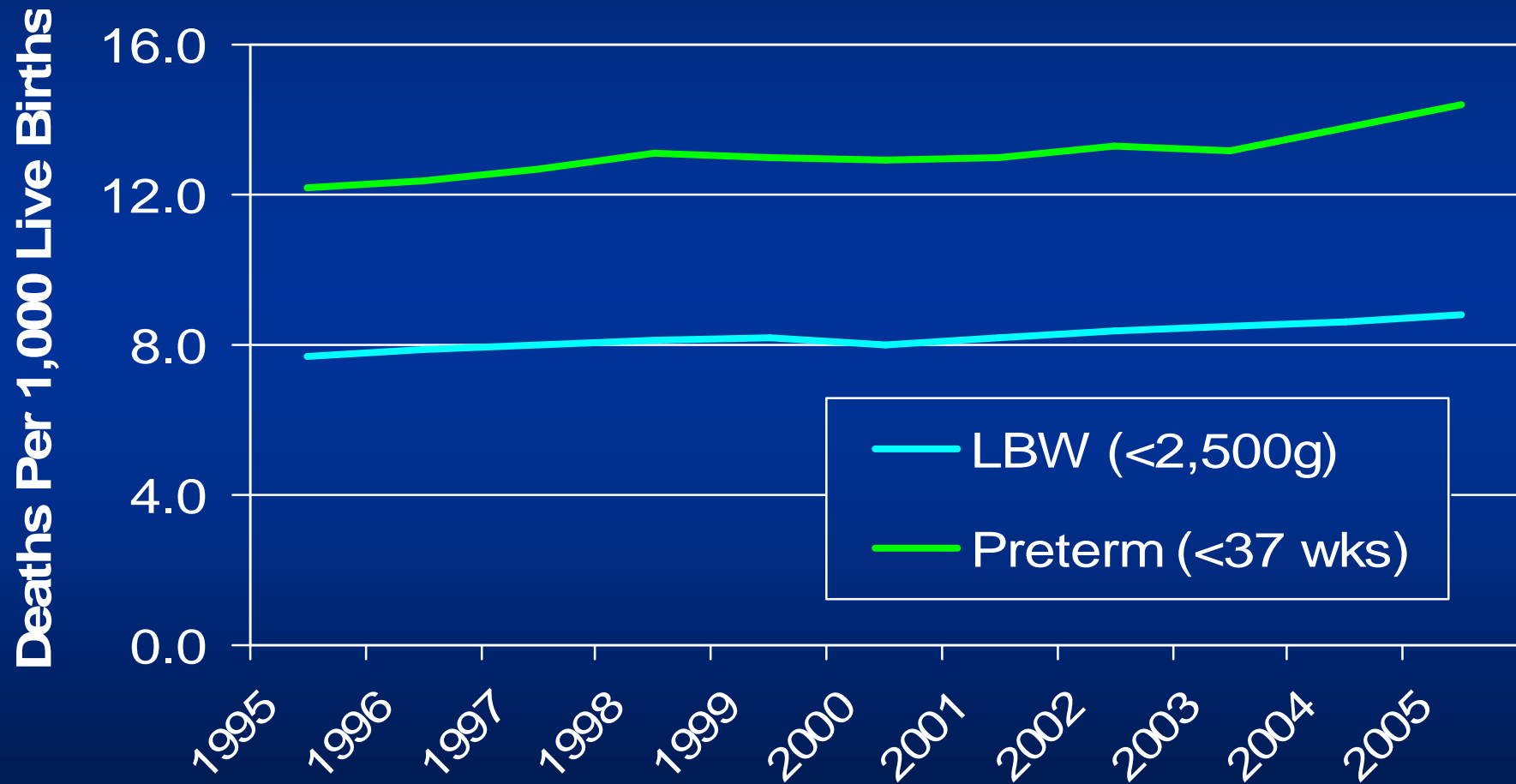


Source: Analysis of FDOH Vital Records Files

3-Year Infant Mortality Rates Florida, 1985-87 to 2003-05

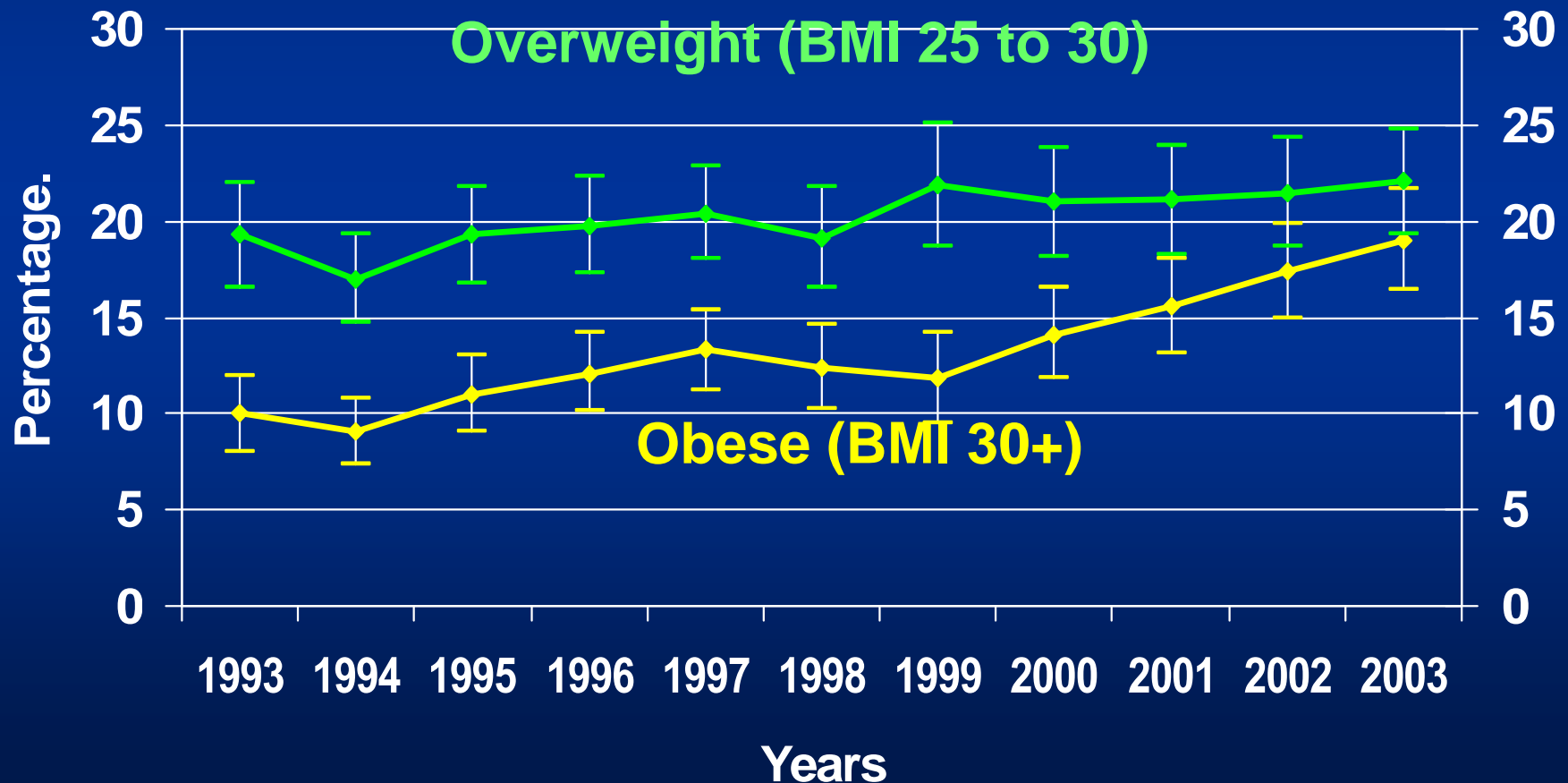


Percent of LBW & Preterm Births Florida, 1995 to 2005



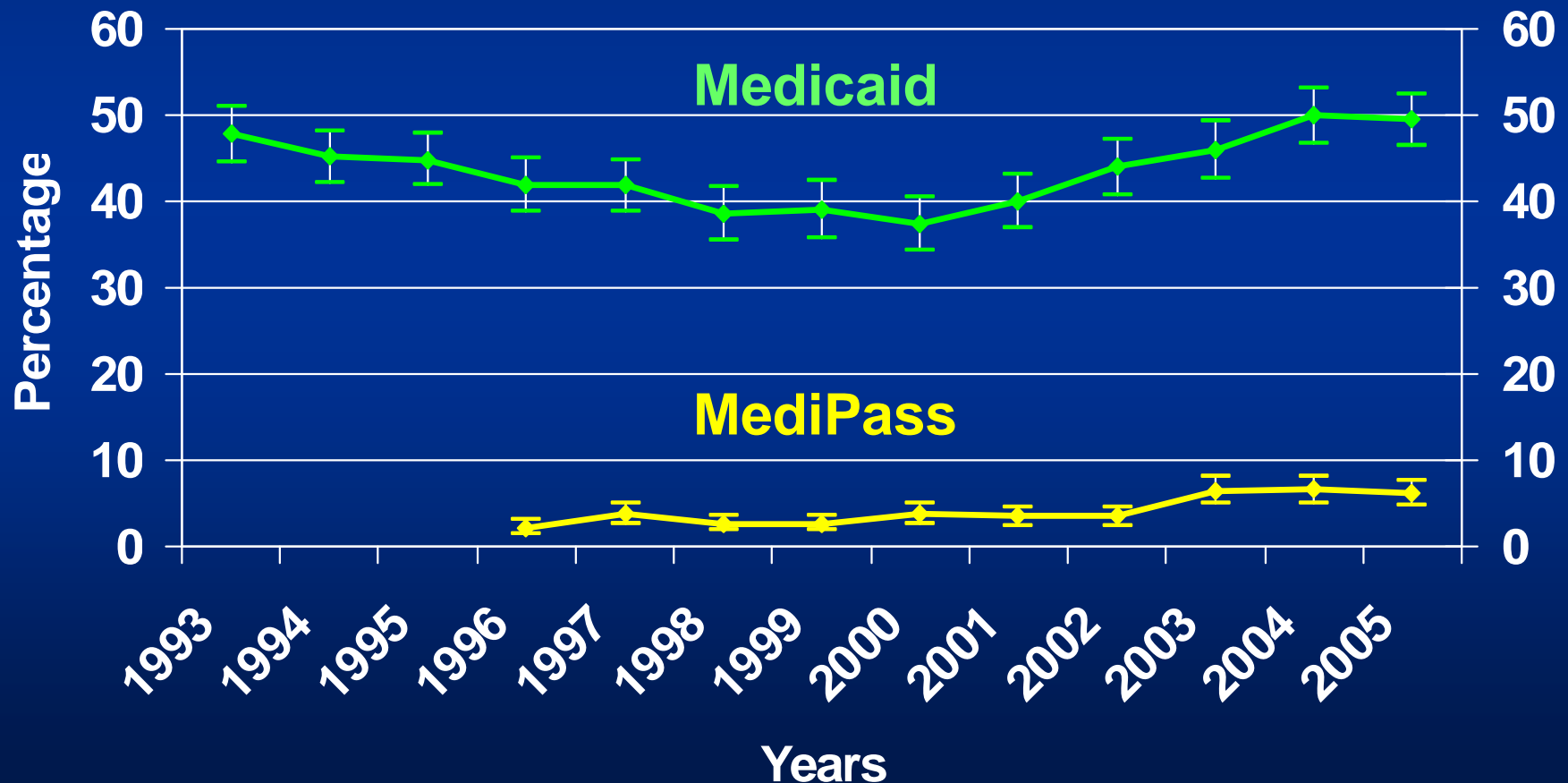
Source: FDOH CHARTS & NCHS Reports

Percent of Live Births to Obese & Overweight Prepregnant Mothers Florida, 1993 to 2003



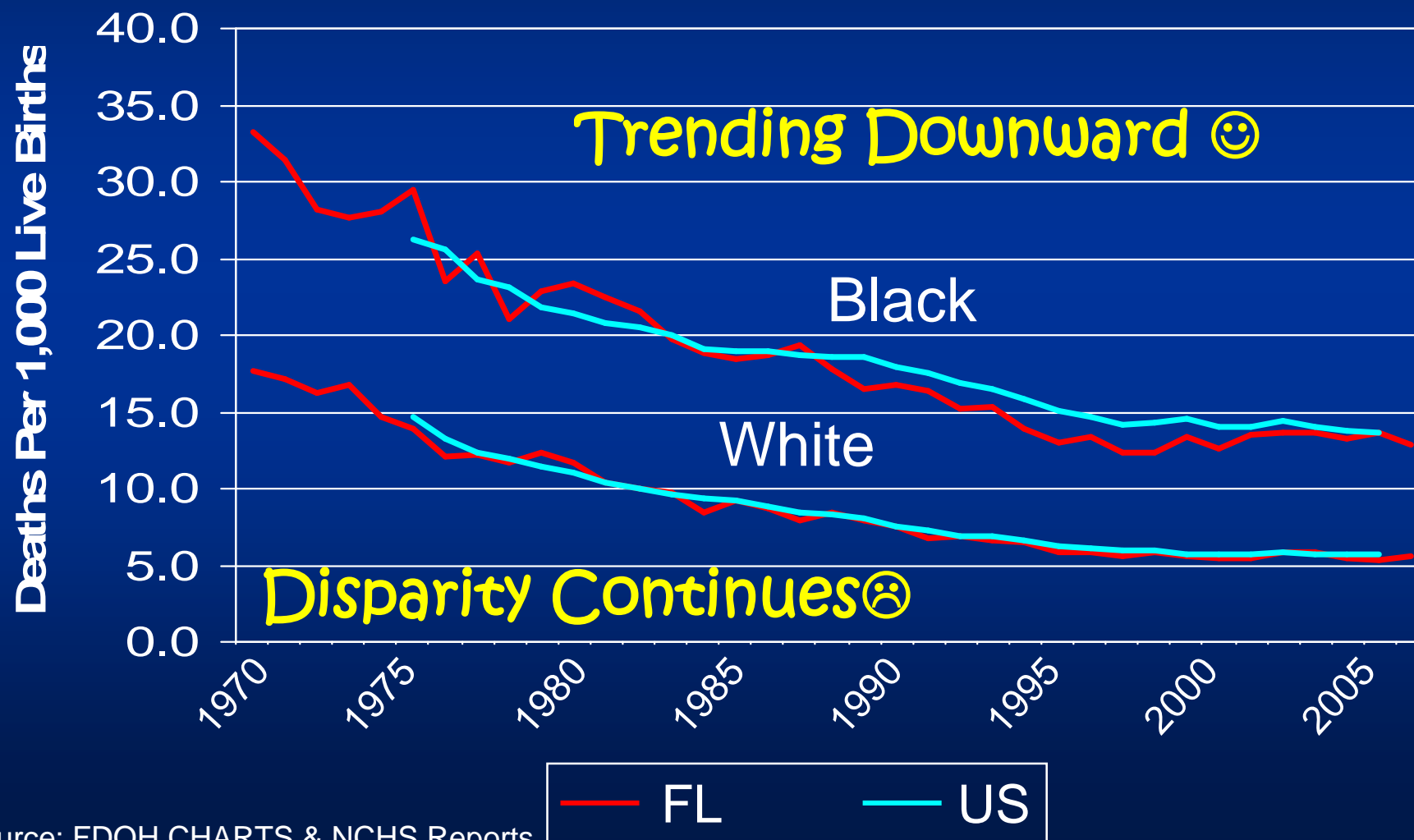
Source: FDOH PRAMS Surveillance Reports (modified)

Percent of Mothers whose Delivery was Paid by Medicaid or MediPass Florida, 1993 to 2005



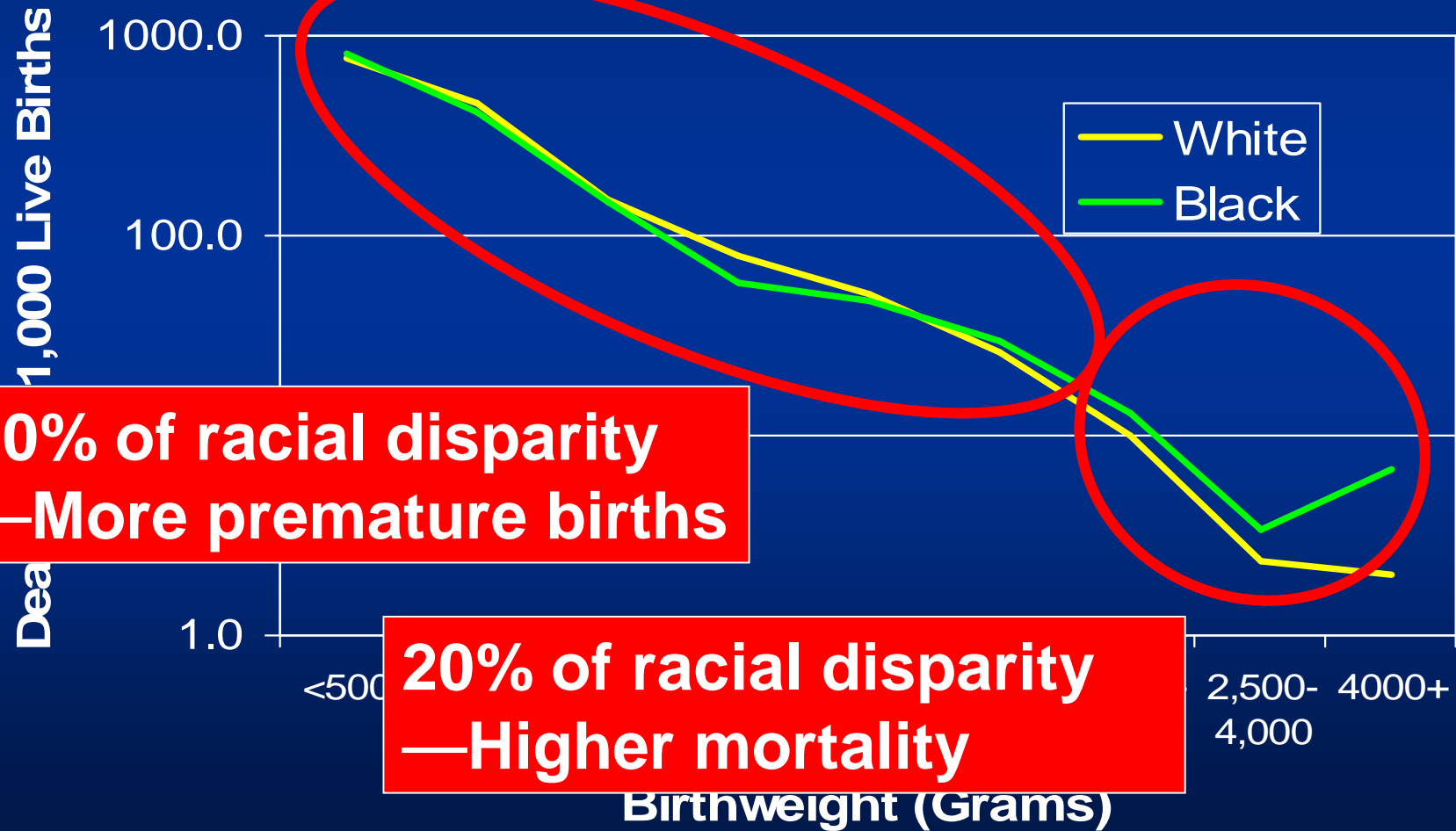
Source: FDOH PRAMS Surveillance Reports

Infant Mortality Rates by Race Florida & US, 1970 to 2006



Source: FDOH CHARTS & NCHS Reports

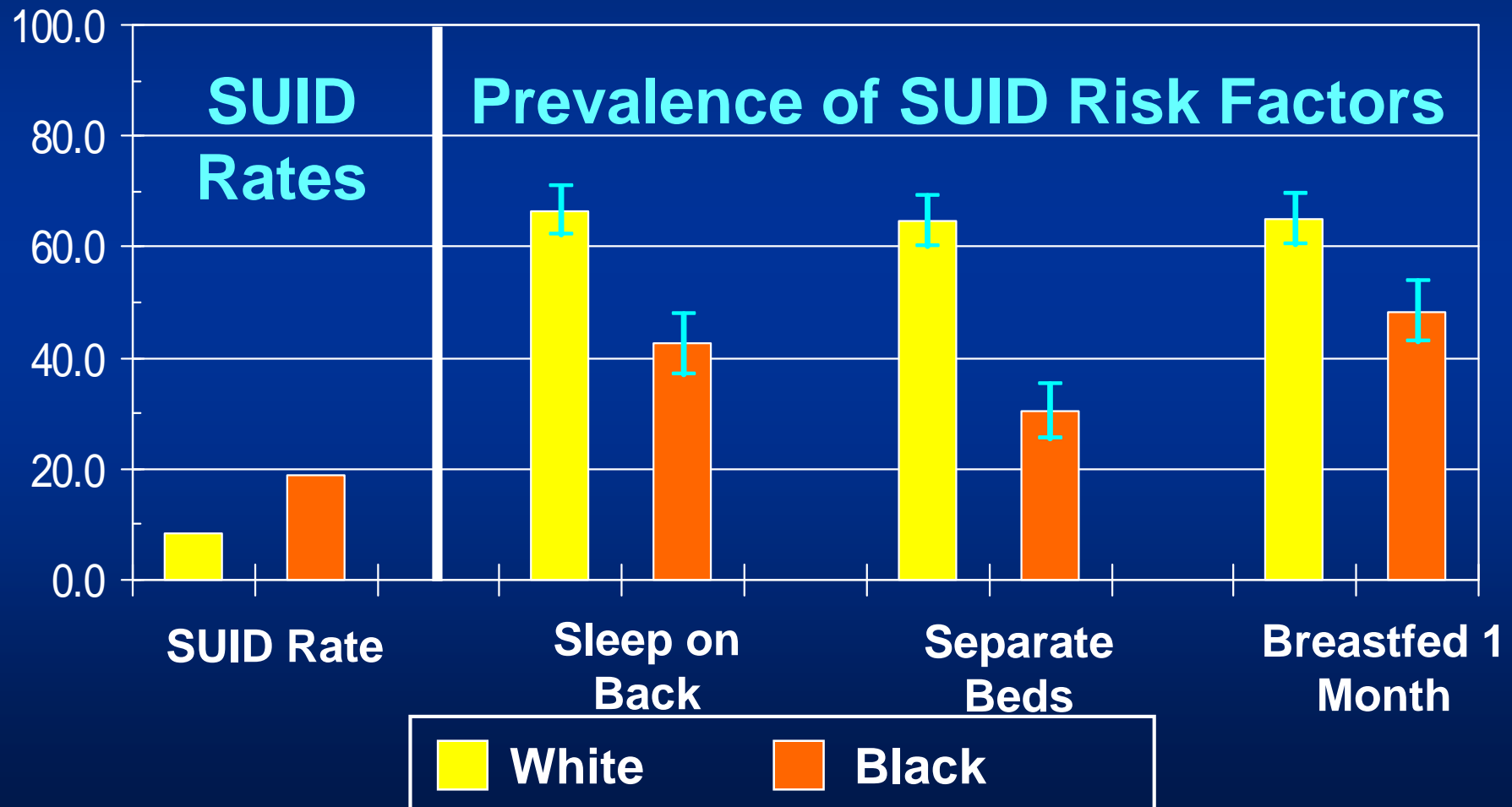
Infant Mortality Rates by Race and Birthweight, Florida, 2001-03



Source: Analysis of FDOH Vital Records Files

SUID Rates Per 10,000 for 2003-05

SUID Risk Factors Percents for 2005 By Mother's Race, Florida

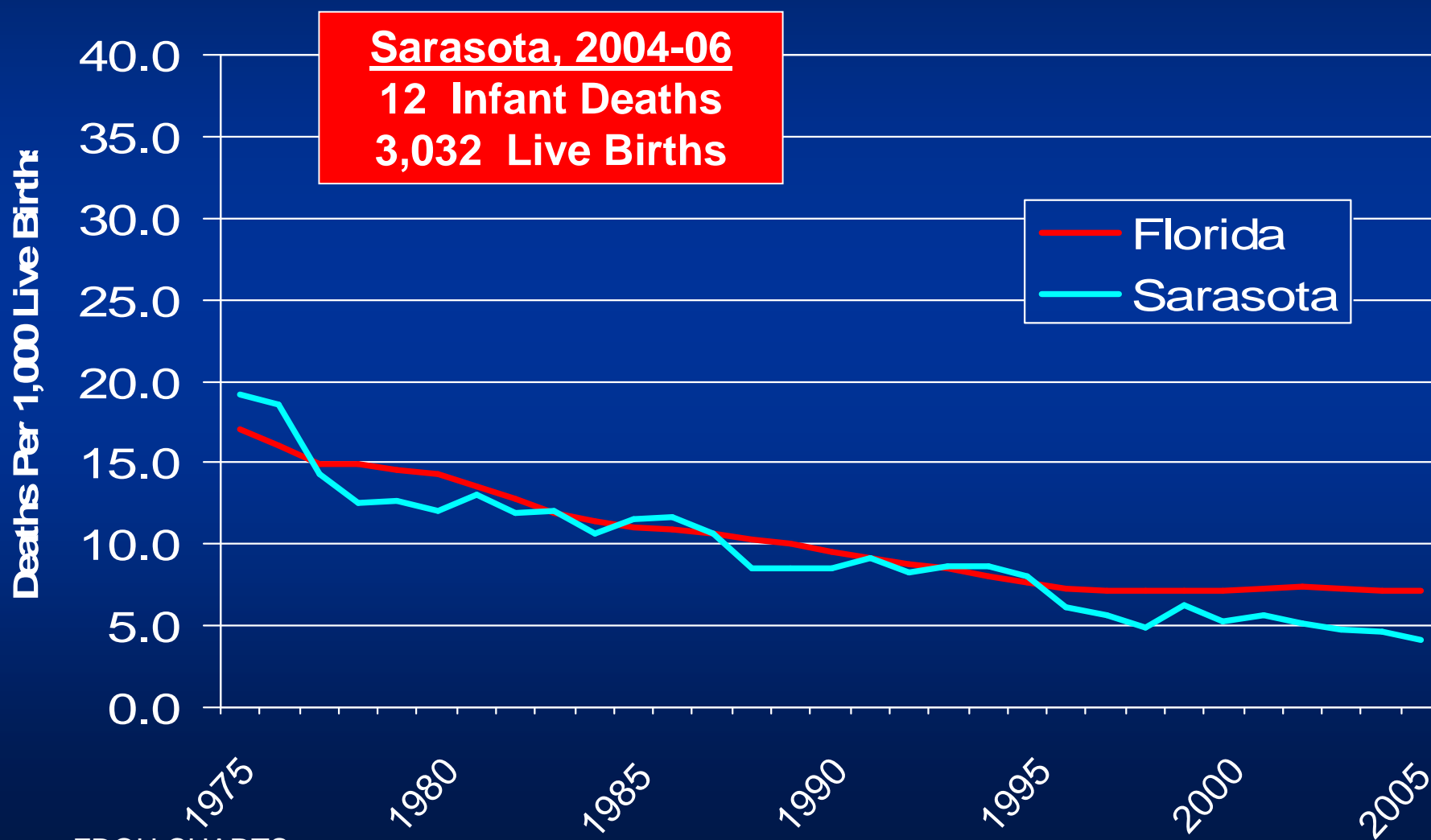


Source: FDOH Vital Statistics & PRAMS Reports

State Summary

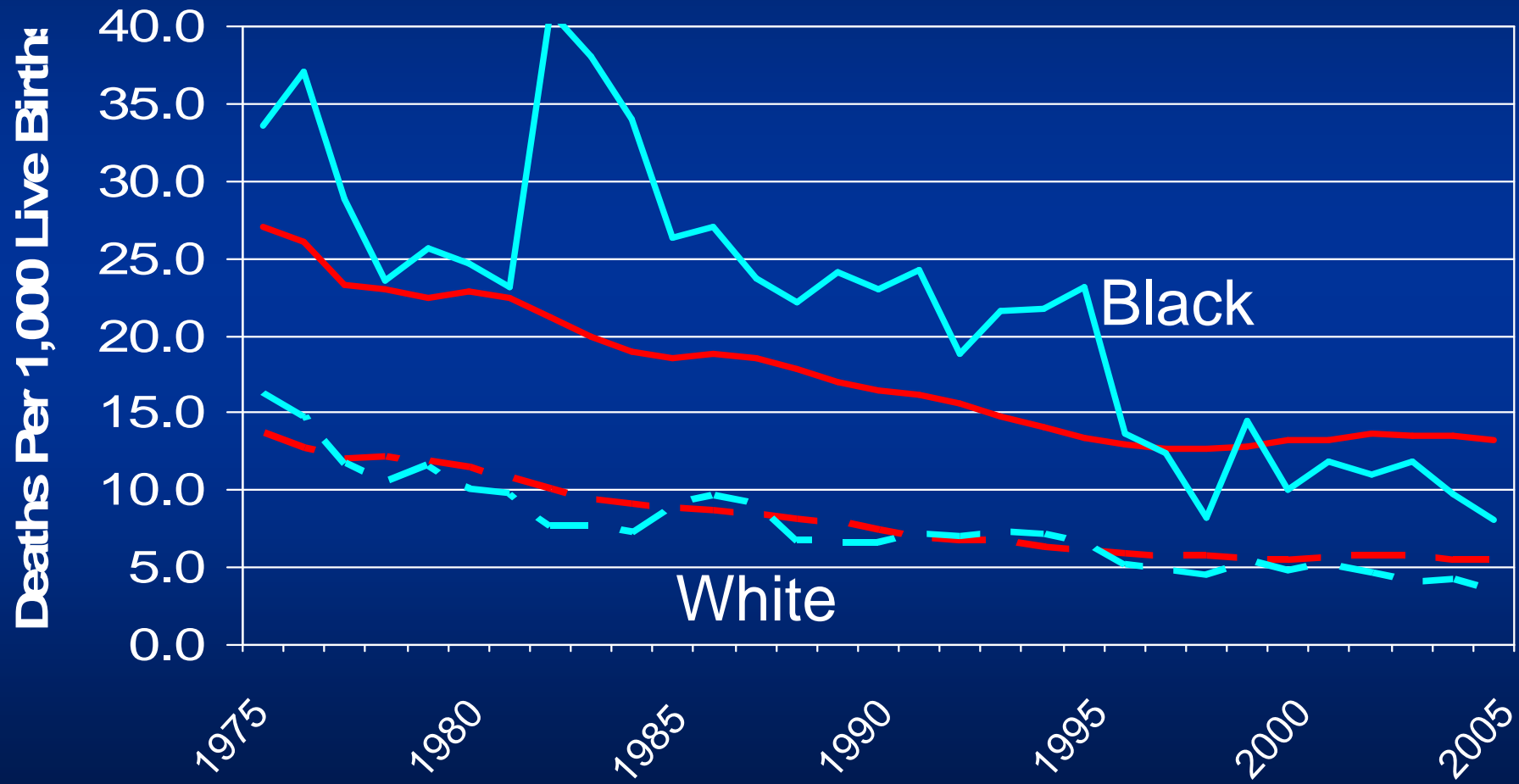
- Florida **infant mortality rate** is generally flat and slightly higher than US.
- New challenges threaten Florida's rate.
- Although rates have improved, the racial gap in Florida is widening.
- Prematurity (80%) and higher mortality among normal weight babies (20%) drive the black/white disparity.
- Preconception/Interconception health & safe sleep are opportunities for improvement.

3-Year Infant Mortality Rates Sarasota & Florida, 1975 to 2006



Source: FDOH CHARTS

3-Year Infant Mortality Rates Sarasota & Florida, 1975 to 2006

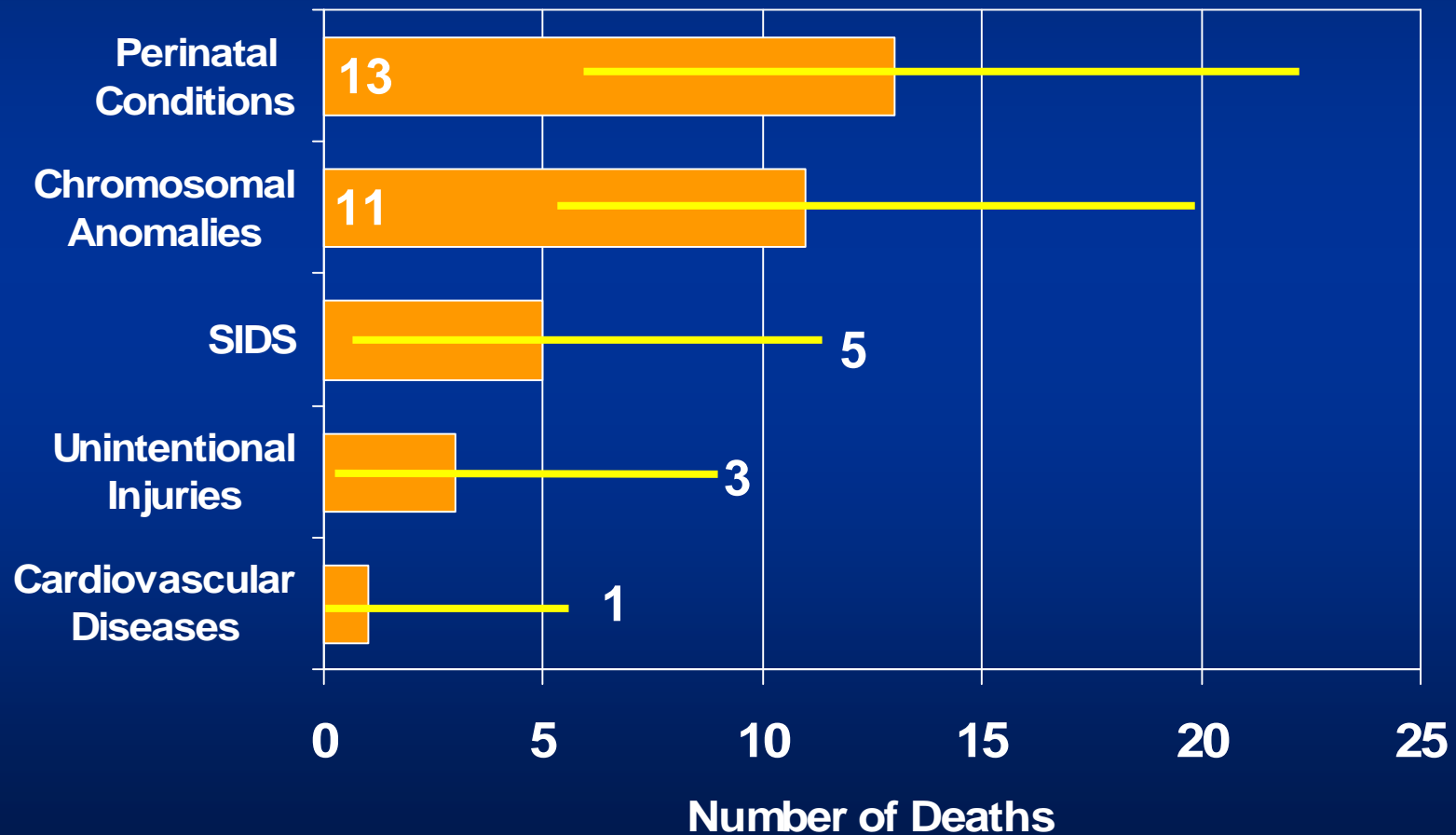


Source: FDOH CHARTS

FL

Sarasota

The FIVE Underlying Causes of Infant Mortality Sarasota, 2004-2006



Causes of Infant Mortality Are Many

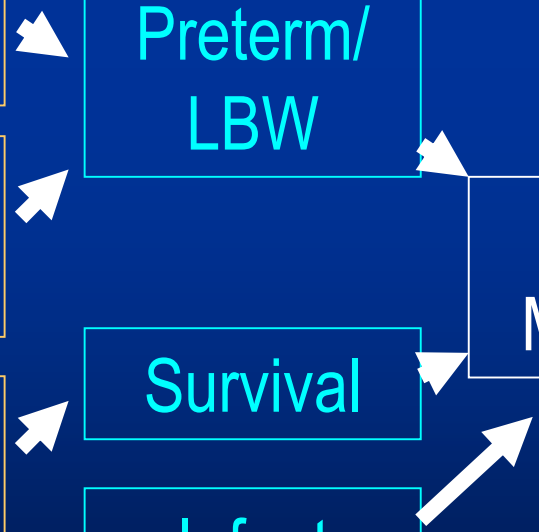
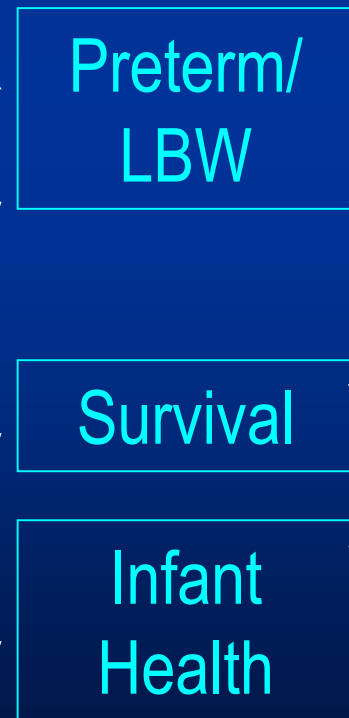
Root Causes



Intermediate Causes



Immediate Causes



Sarasota, Causes of Infant Mortality

Root Causes

Economics

Health

Education

Crime

Health Care

Support

health

housing

health care

dental care

drinking

economic

education

economic crime

violent crime

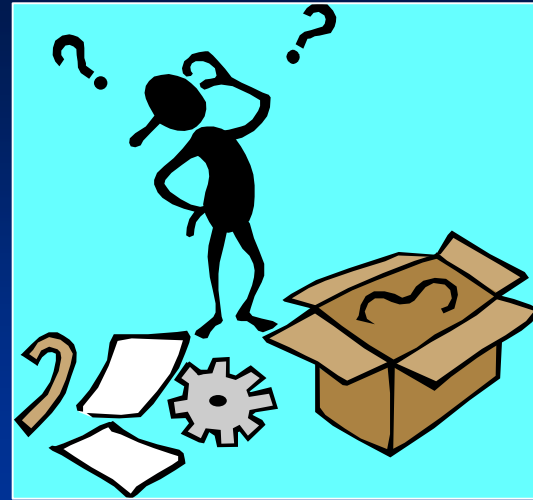
Youth substance
abuse

Infant
Mortality

Sarasota Summary

- **Sarasota's infant mortality rate**
 - Consistently lower than Florida's rate
 - Trend is flat to slightly decreasing
- **Sarasota's racial gap**
 - Similar to state's gap
 - Black mortality rate is declining faster than state's rate
 - White rate is lower than Florida's rate
- **Both individual and community factors contribute**

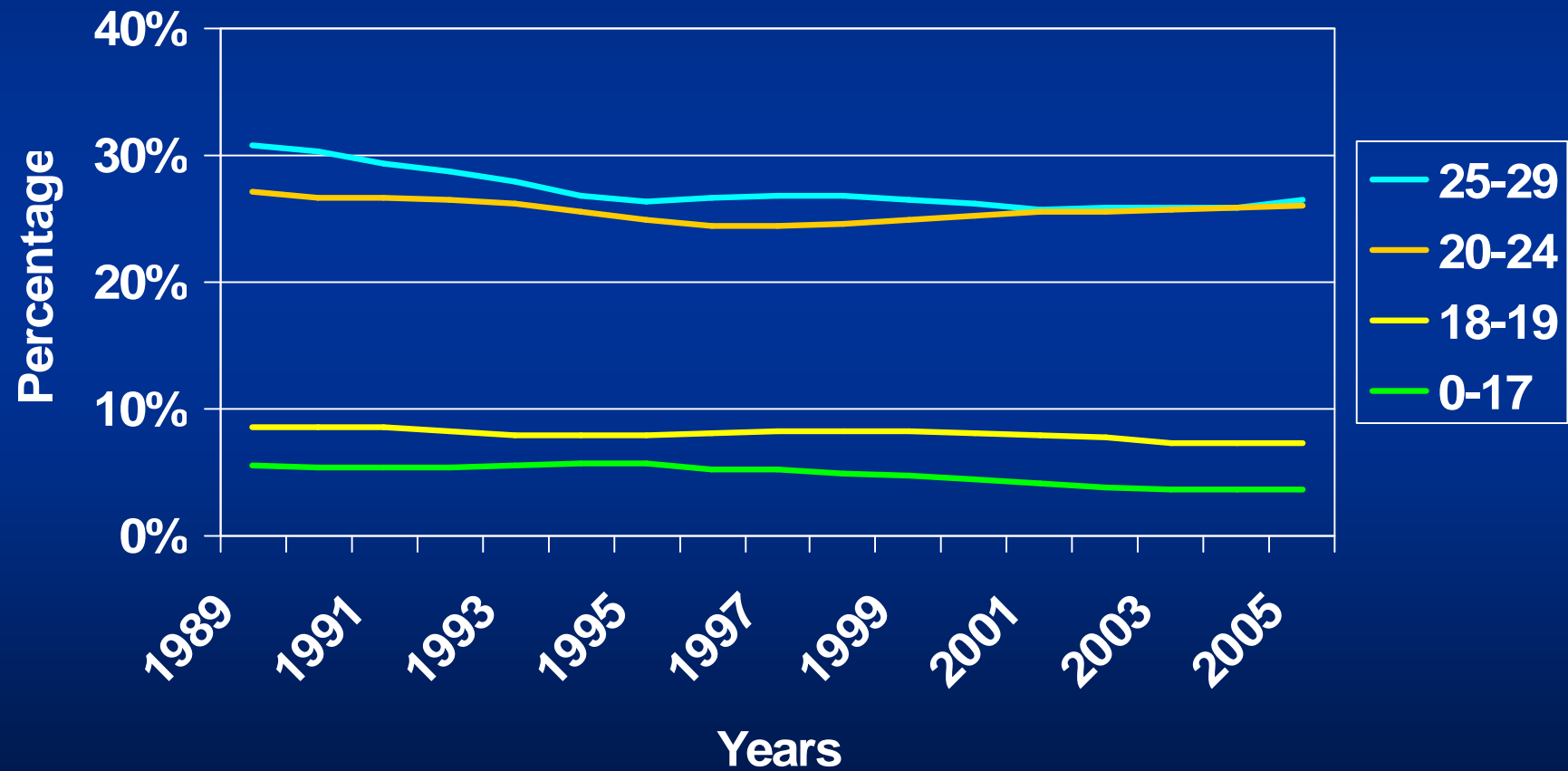
Infant Mortality Challenges



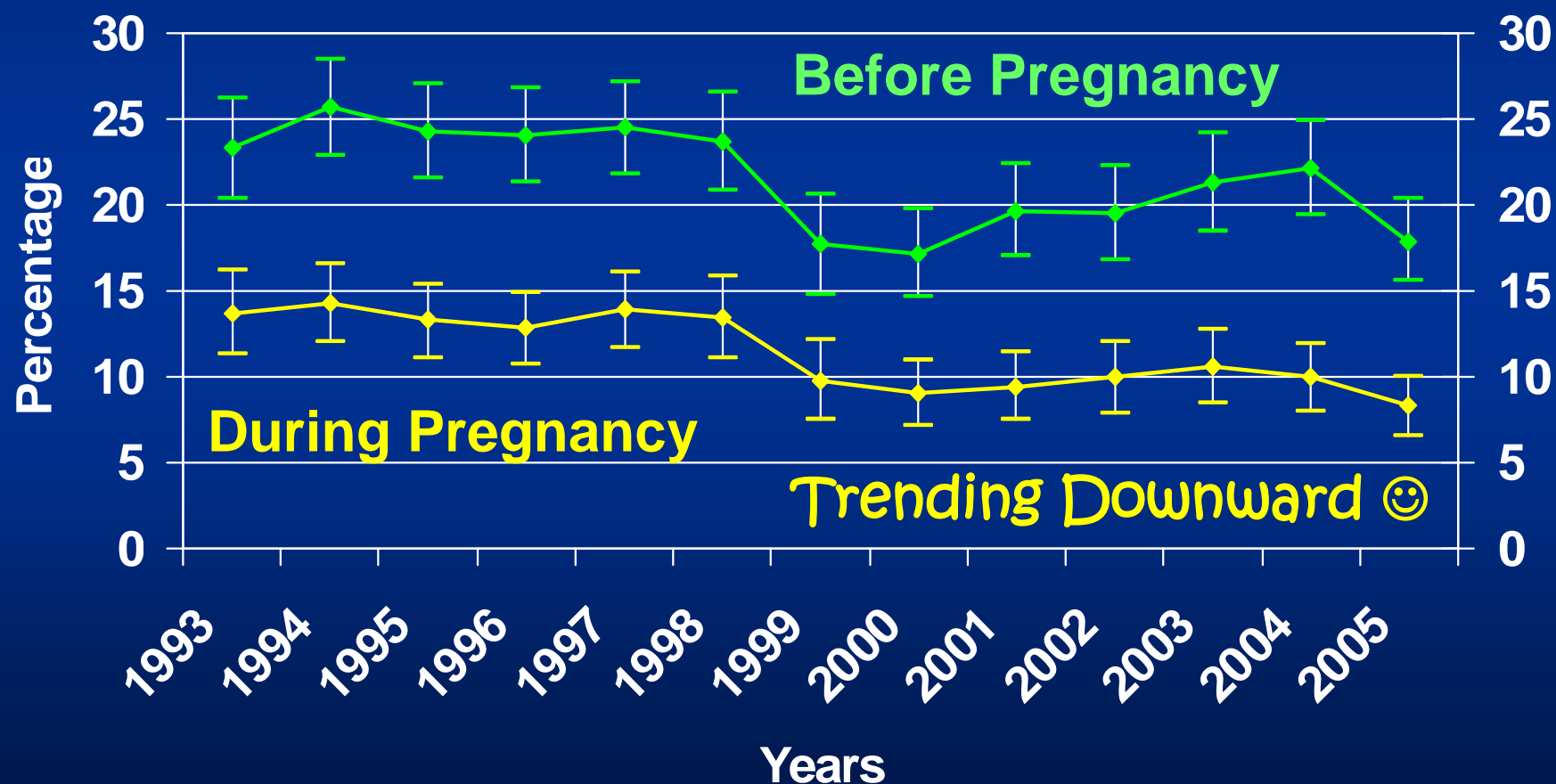
- Increasing prematurity / low birthweight
- Increasing high risk pregnancies—age, chronic diseases, and infertility treatments
- Maintaining a quality perinatal system

**Some
Positive
Trends!!!**

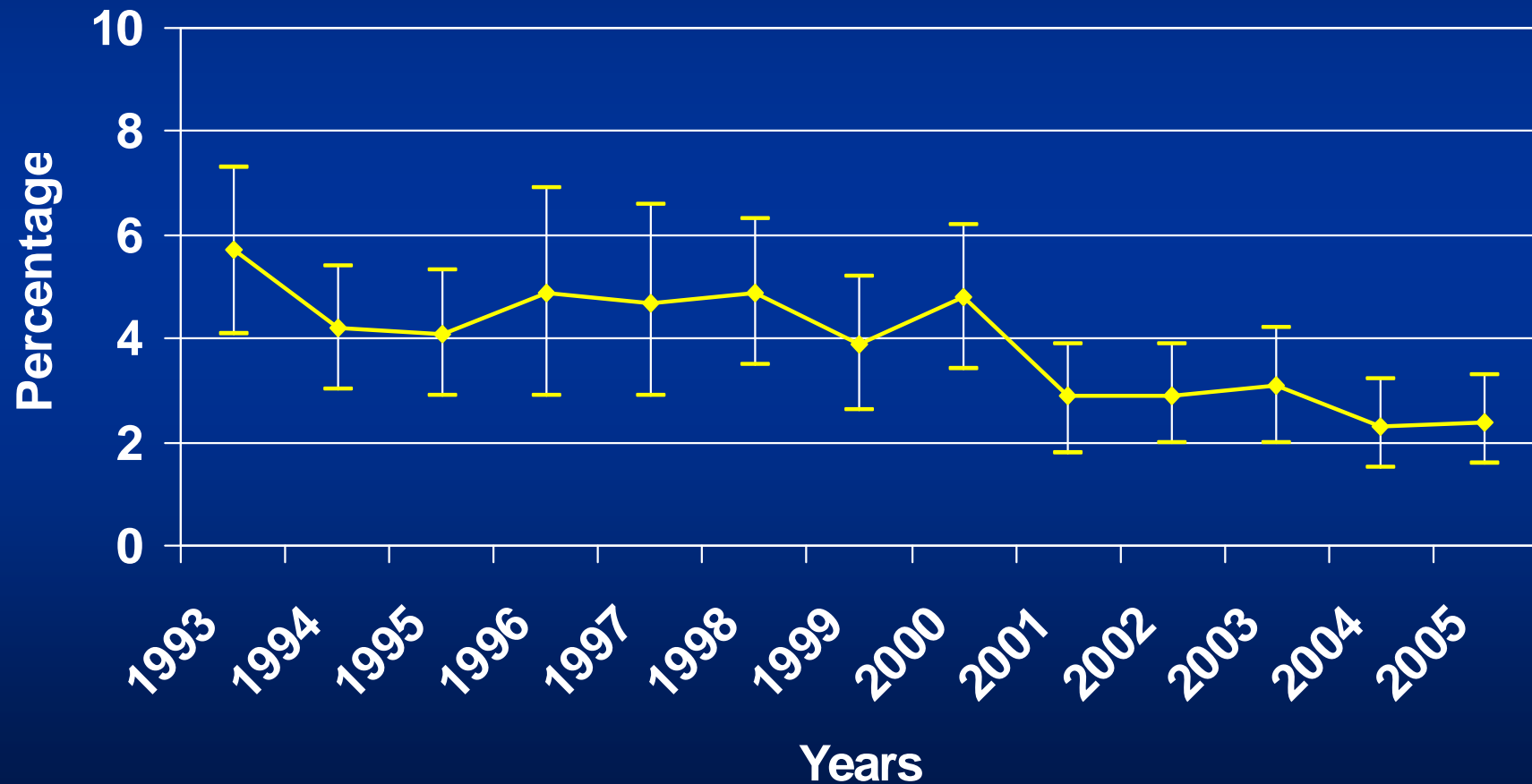
Percent of Live Births to Mothers by Ages Less Than 30 Years Florida, 1989 to 2005



Percent of Live Births to Mothers Who Smoked Before & During Pregnancy Florida, 1993 to 2005

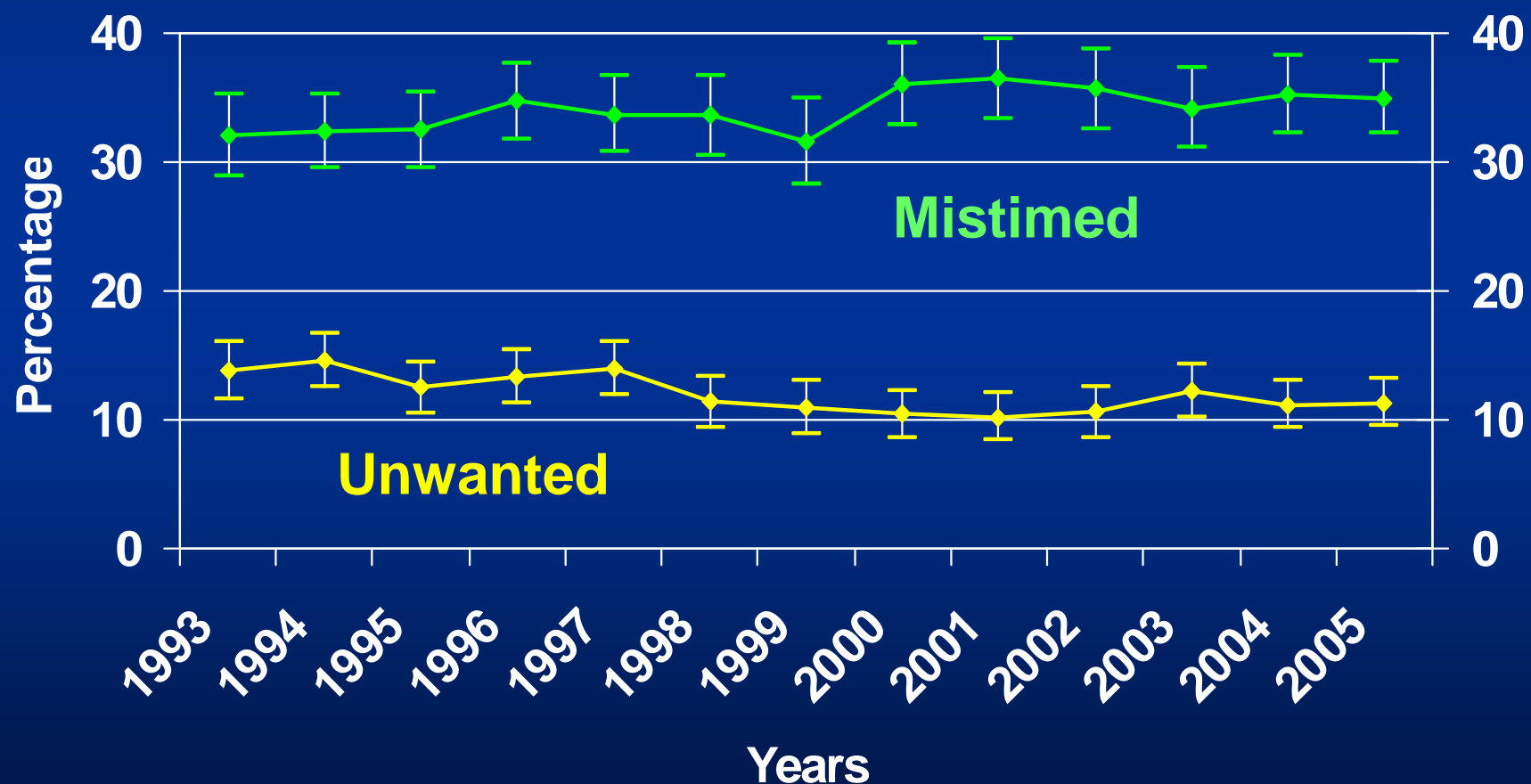


Percent of Live Births to Mothers Abused During Pregnancy Florida, 1993 to 2005



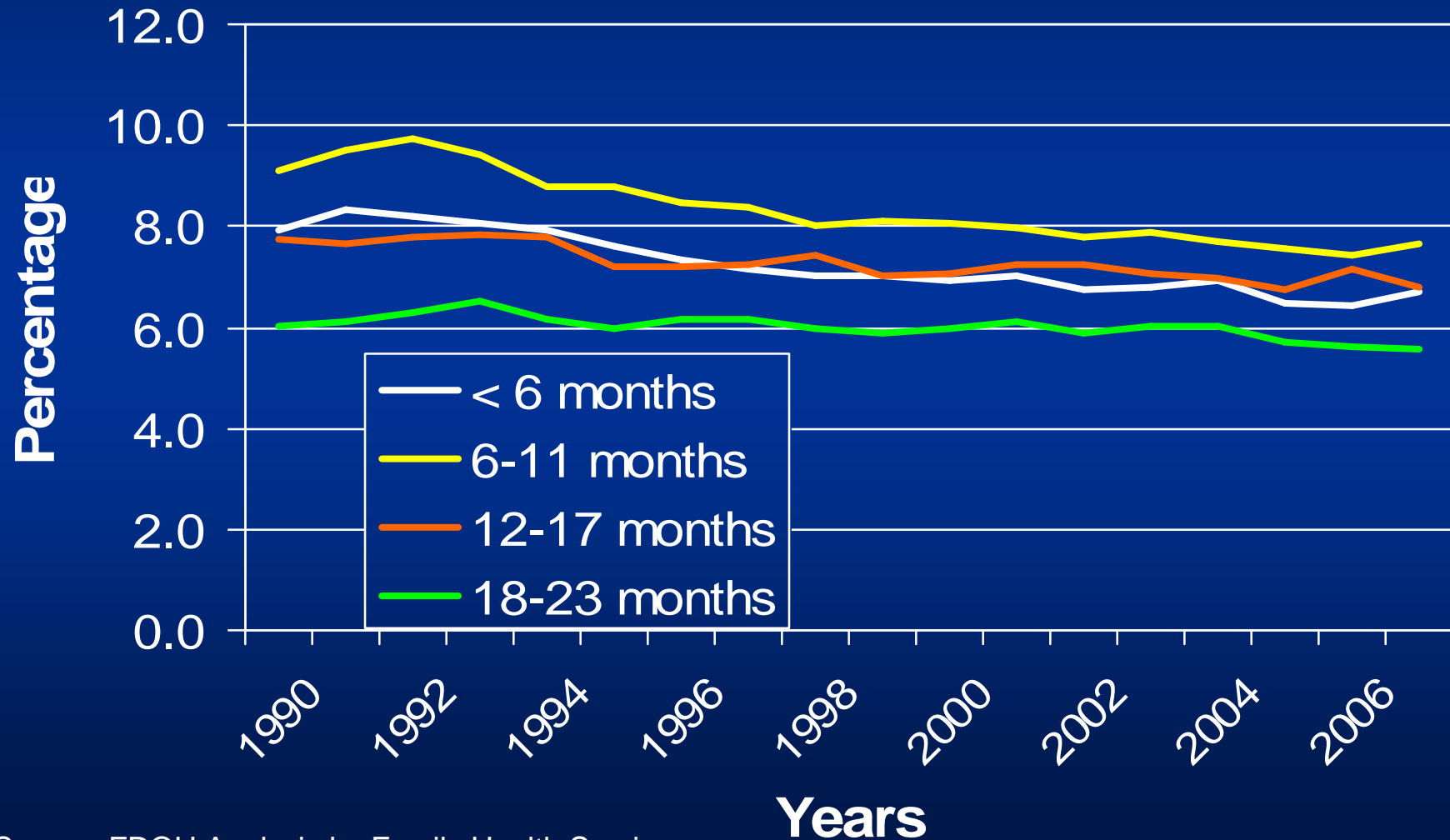
Source: FDOH PRAMS Surveillance Reports

Percent of Live Births to Mothers with Mistimed & Unwanted Pregnancies Florida, 1993 to 2005



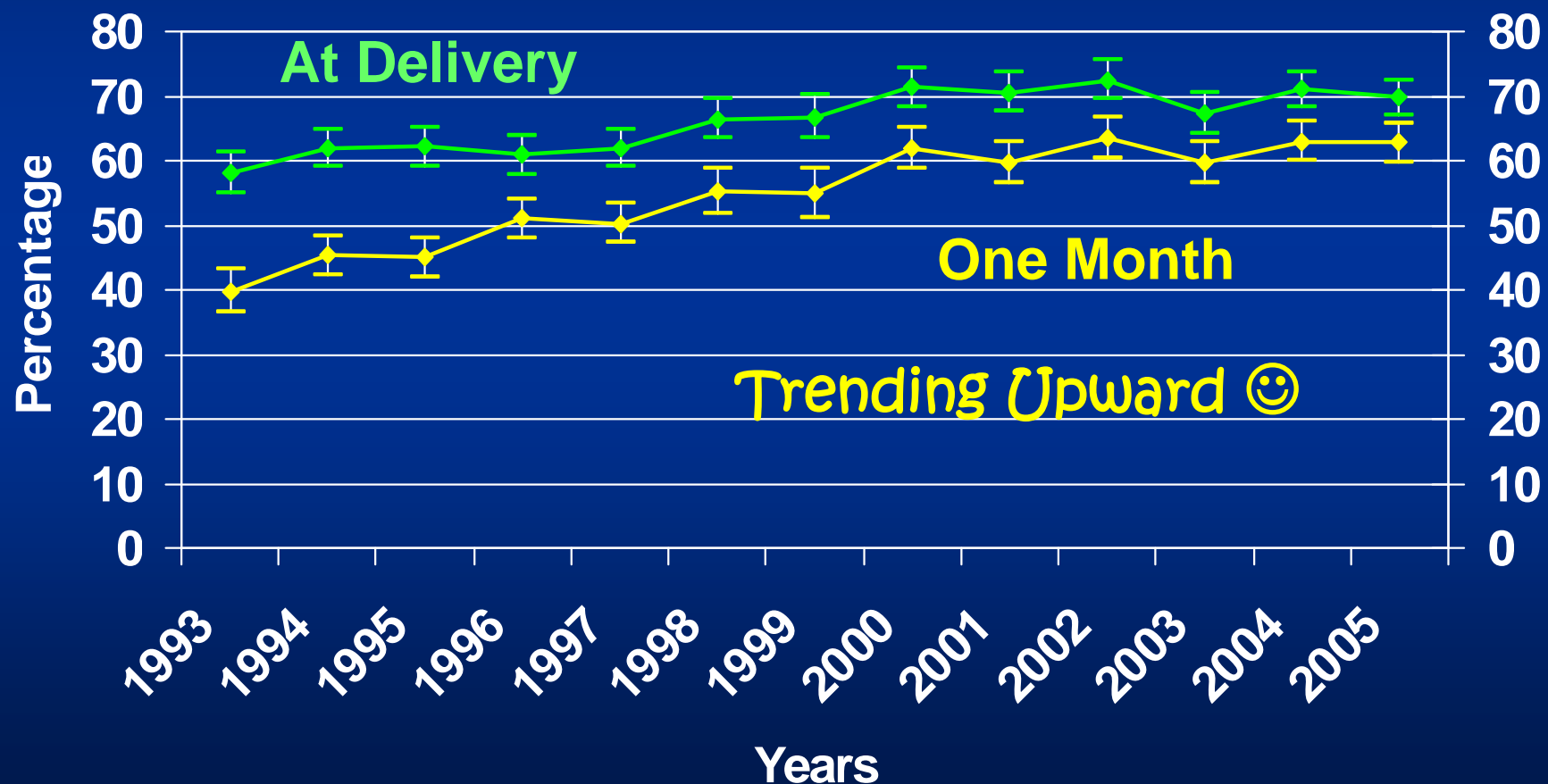
Source: FDOH PRAMS Surveillance Reports

Percent of Live Births to Mothers by Interpregnancy Interval Florida, 1989 to 2006

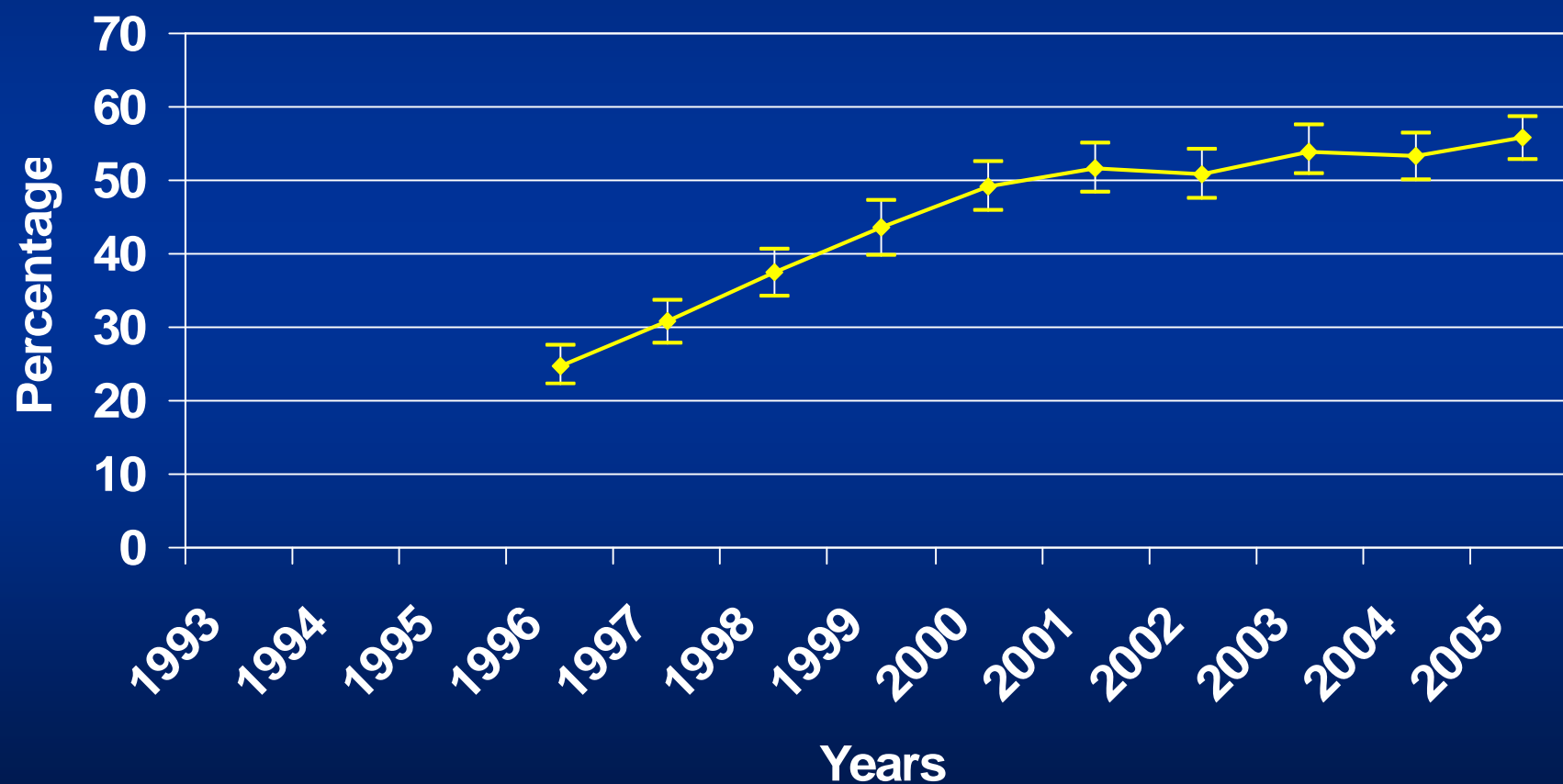


Source: FDOH Analysis by Family Health Services

Percent of Live Births to Mothers Who Breastfeed Including Supplementation Florida, 1993 to 2005



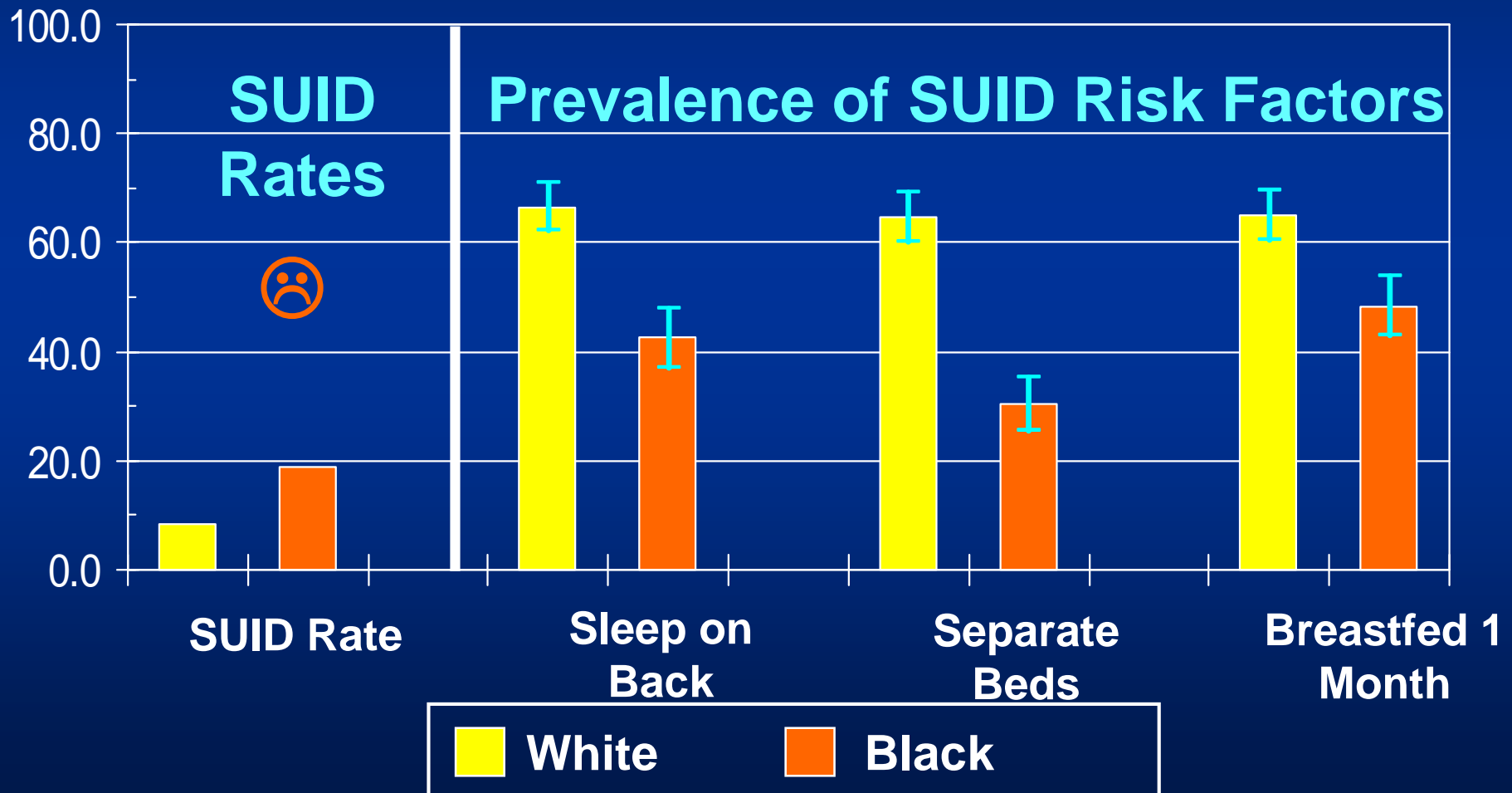
Percent of Live Births Placed to Sleep Most Often on Their Backs Florida, 1996 to 2005



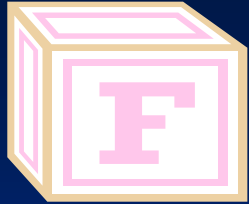
Source: FDOH PRAMS Surveillance Reports

SUID Rates Per 10,000 for 2003-05

SUID Risk Factors Percents for 2005 By Mother's Race, Florida

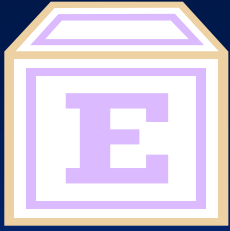


Source: FDOH Vital Statistics & PRAMS Reports



Fetal Death and Infant Mortality are preventable!!!

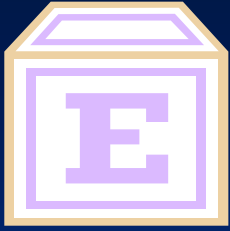




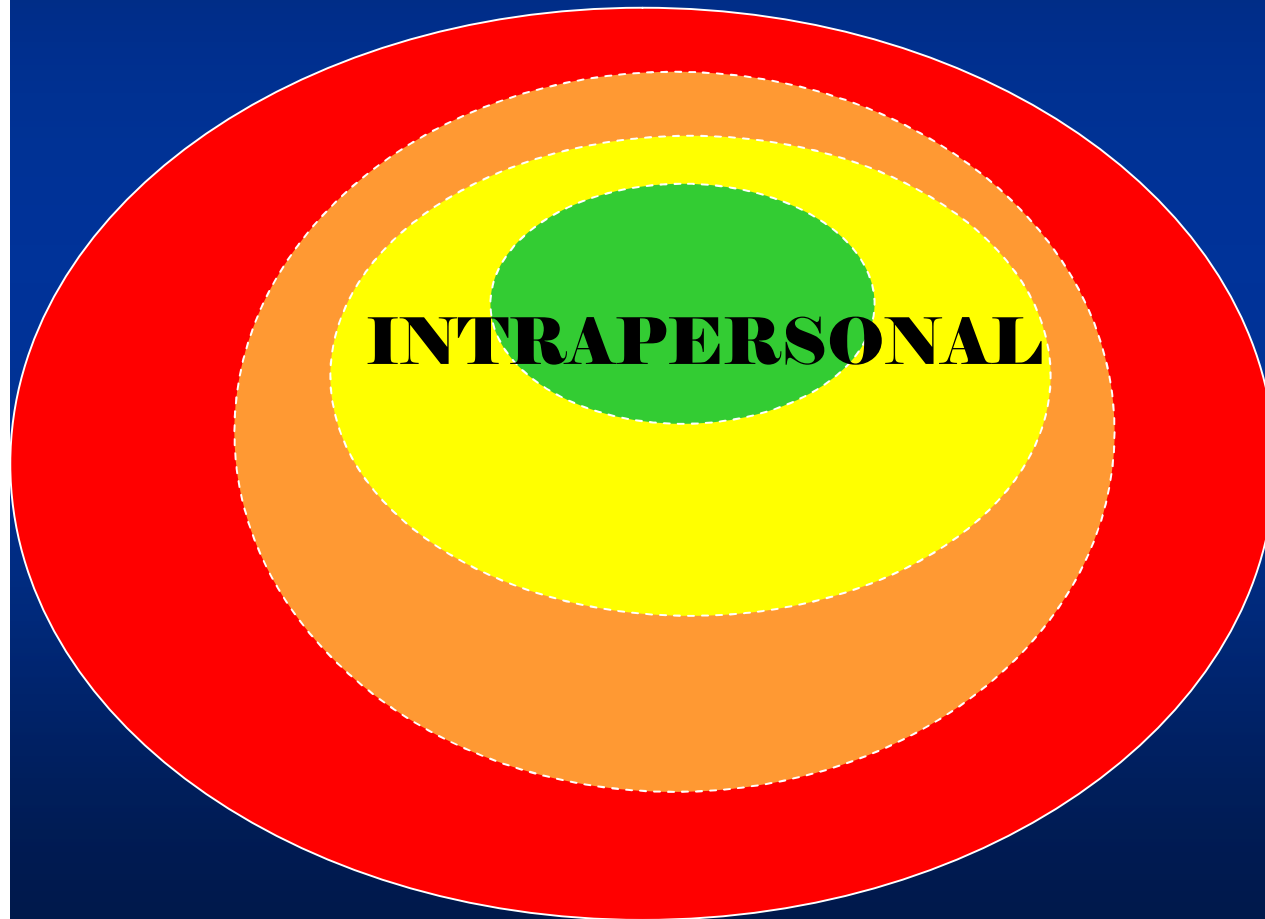
Everyone can help **SAVE MY LIFE**



**Social-
Ecological
Model**



Everyone can help **SAVE MY LIFE**

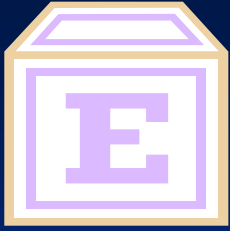


INTRAPERSONAL

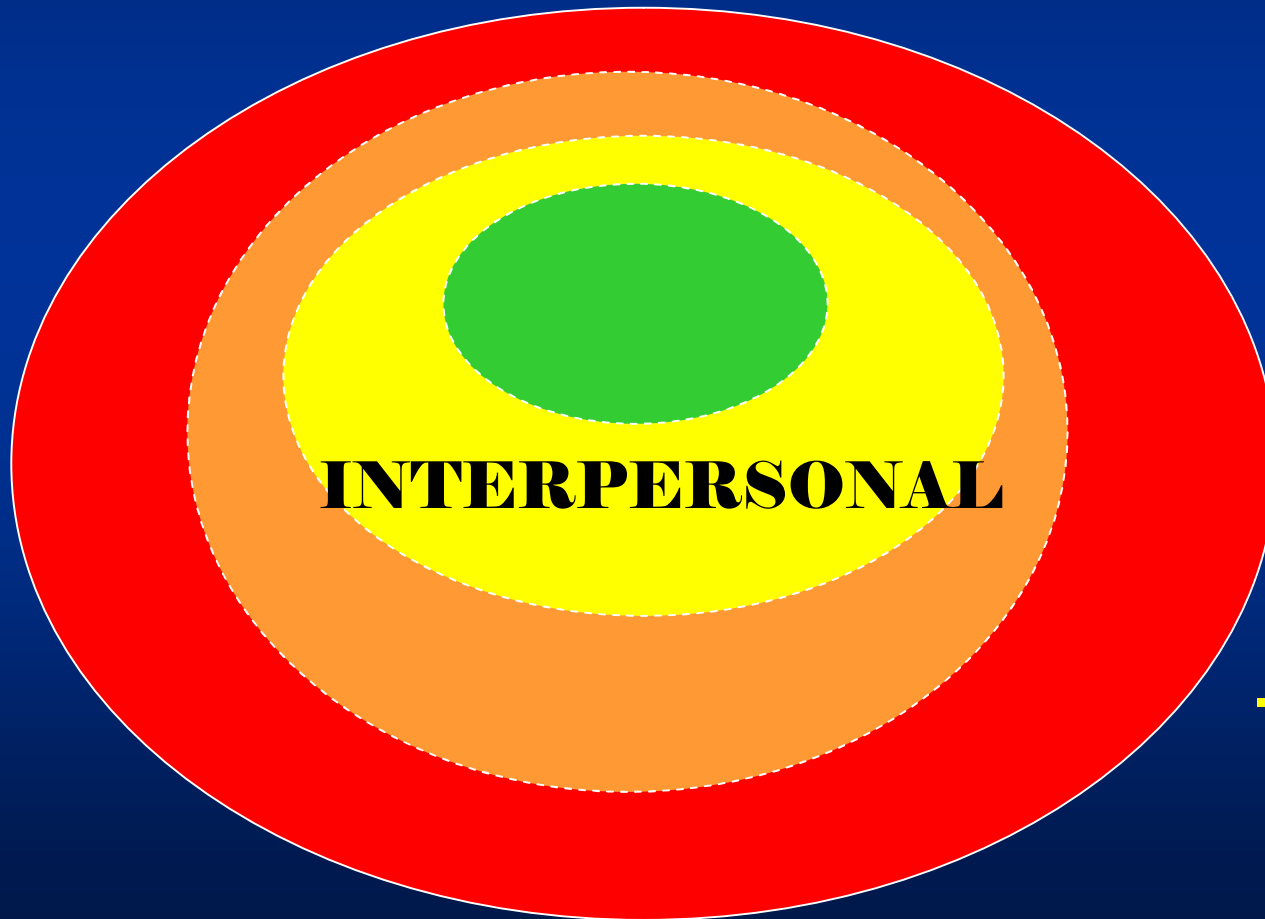
-Wrist Band

-Brochures

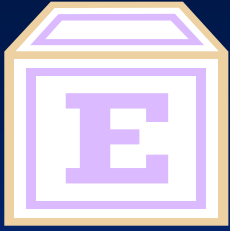
-Church Fan



Everyone can help **SAVE MY LIFE**



**-Body & Soul
Curriculum**



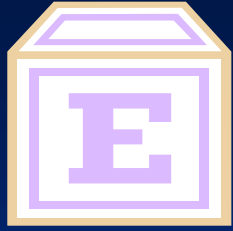
Everyone can help **SAVE MY LIFE**



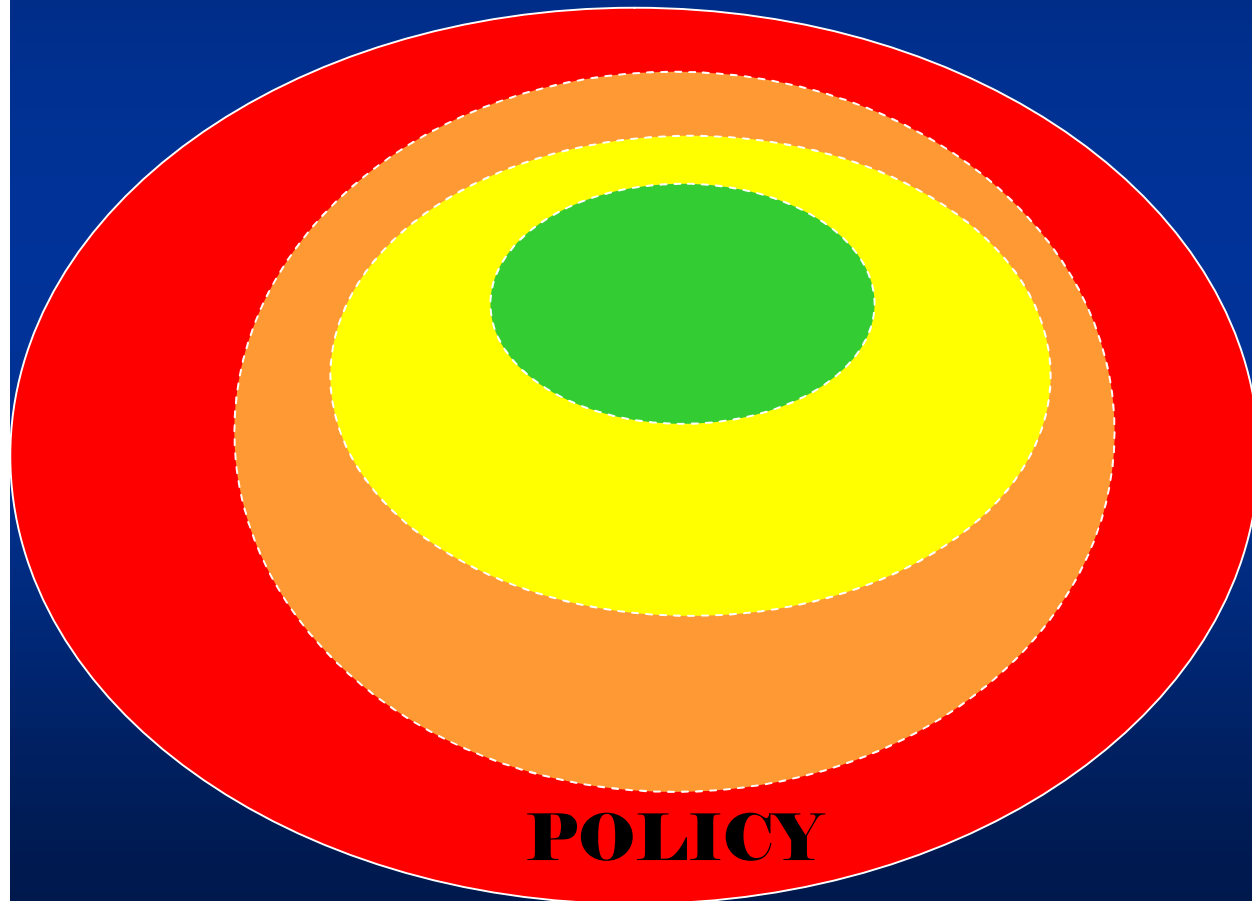
-Genesis?

**-Health in
Motion?**

**-Standards
of Care**



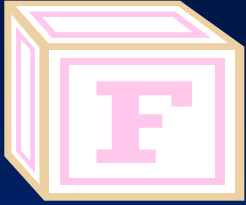
Everyone can help **SAVE MY LIFE**



-Medicaid

-Healthy Start

**-Community
Advocacy**



Fetal death is preventable



**So What More
Can We Do?**

Save My Life Pilot Project



Everyone can help **SAVE MY LIFE**



**Review
The Four
Components**

Target Audience for Project

- Women of childbearing age and pregnant women who reside in **Newtown**, a one square mile area of predominately African-American residents)
- Fetal and infant death maps indicate **higher concentrations of fetal and infant death** within this geographic area
- In Sarasota County, **higher perinatal mortality** (fetal death \geq 28 weeks, plus infant deaths 7 days of age or less) **is higher among our African-American population**
 - **2005 provisional data indicates a rate of 15.7 per 1000 live births for African-Americans versus 4.9 for Caucasians**
 - **The fetal death rate** (fetal death $>$ 20 wks gestation) for African-Americans was 30.9 in 2005 compared to 4.9 for Caucasians
 - **Neonatal mortality** (infant death $<$ 28 days) was slightly higher at 4.0 compared to 3.4, though in 2003 it was 18.7 for African-Americans
 - **Breastfeeding initiation rate** for African-Americans in 2005 was 63.1% compared to 79.7% for Caucasians

Project's Key Measurable Components

- Ongoing groups for pregnant women and teens focusing on pregnancy health, maternal mental health, and interconception health
- Individual small group classes on childbirth education, breastfeeding education, and smoking cessation
- Implementation and oversight of New Jersey March of Dimes' "Body and Soul Program" in three Newtown churches
- Project carried out by Healthy Start

Evaluation of Components and Success

- 80% of scheduled classes and groups held because attendance was sufficient
- Pre- and Post-Tests indicate knowledge was gained by participants
- 80% of birth outcome records from participants are obtained by the Coordinator

Evaluation of Components and Success

- 80% of birth outcome records indicate some level of activities or behaviors to minimize risks were embraced by participants, such as:
 - quitting smoking
 - eating more healthy foods
 - increasing exercise
 - brushing and flossing teeth twice per day
 - avoiding douching
 - taking measures to improve mental health
 - utilizing education and prayer for strength and improving health behaviors (Body and Soul participants)
 - utilizing relaxation methods during pregnancy and during childbirth
 - initiating and maintaining breastfeeding

Evaluation of Components and Success

- If the project is funded for the full-three years of the project, we hope to see a 25% reduction in fetal, infant, and perinatal death rates among African-Americans in the Newtown area and an increase of 25% in breastfeeding rates

Best Practices In Prevention of Fetal Death



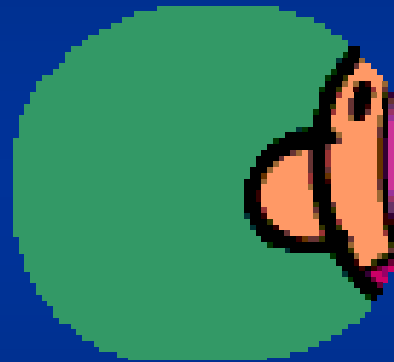
Time To Get To Work!



Questions?



Thank You For



Listening To Me