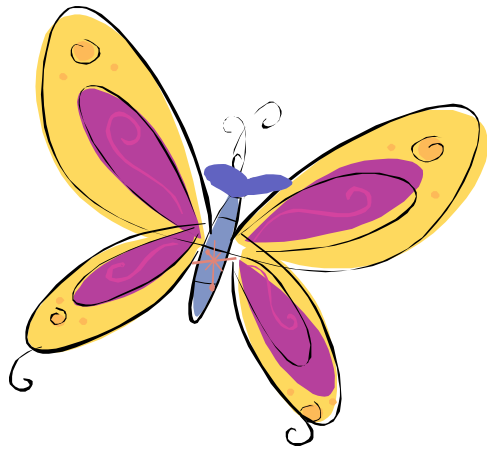


Los Angeles  
Health  
Overview of a  
Pregnancy  
Event

# A New Approach to Fetal Infant Mortality Review (FIMR) for Use with Large, Diverse, and Dispersed Populations



Maternal, Child & Adolescent Health  
Programs, Los Angeles County  
Department of Public Health

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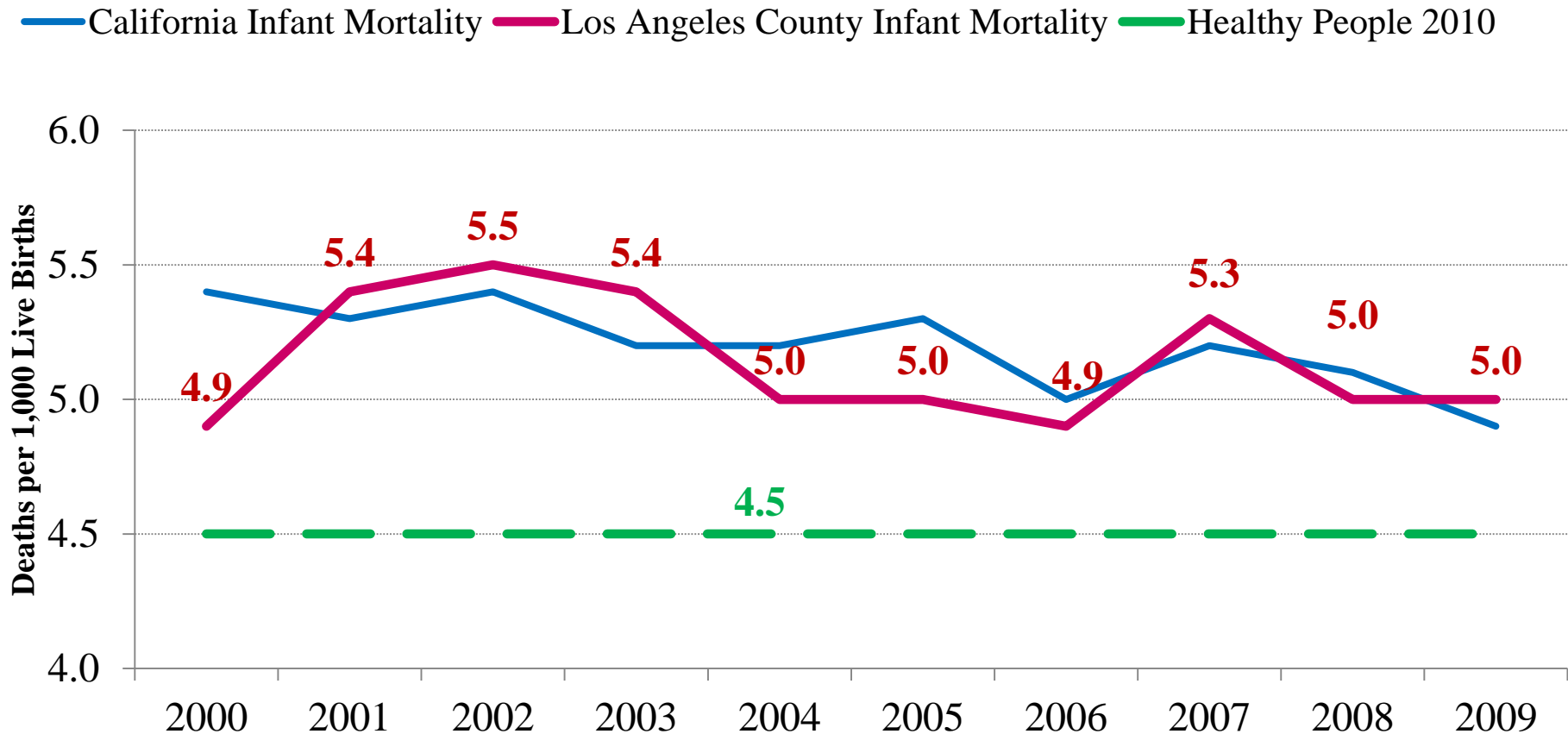
Marian Eldahaby, BA, Chandra Higgins, MPH,

Angel Hopson, MPH, Diana Ramos MD, MPH, Cynthia Harding, MPH



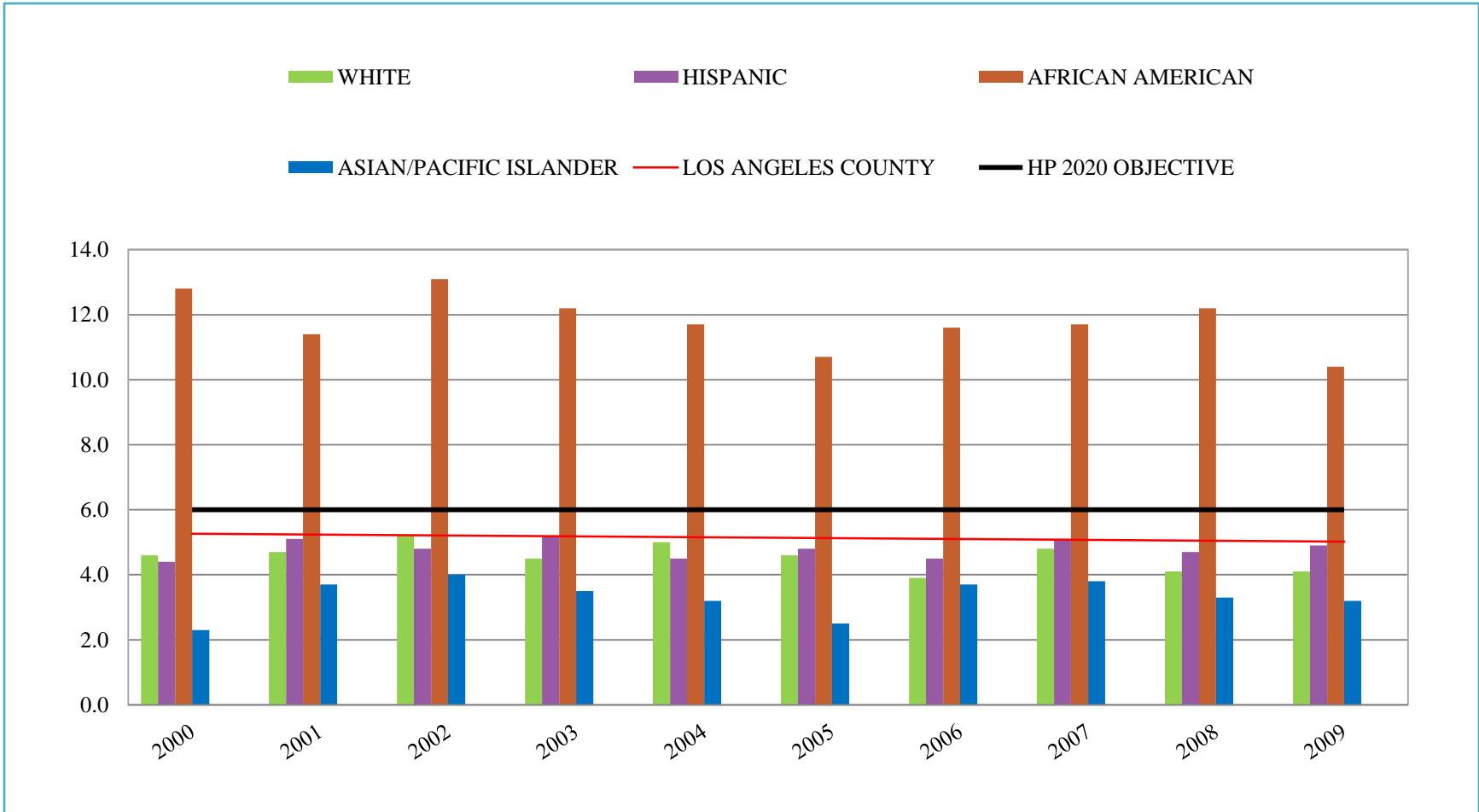
# Infant Mortality Rates

## Los Angeles County 2000-2009



# Racial Disparities in Infant Mortality

## Los Angeles County 2000-2009



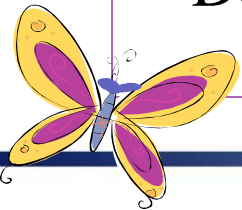
# Fetal Infant Mortality(FIMR) vs. HOPE

## FIMR Model

- Medical chart records reviewed
- Maternal interview
- Representative ? 44 cases/yr
- Data quality ?
- Descriptive approach

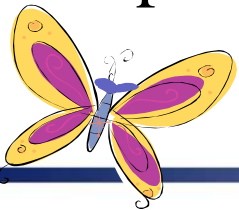
## HOPE

- Population-based survey
- 35-40 minutes to complete survey
- Representative ( $\approx 300$  cases /yr):
  - Randomly select cases from each SPA;
- High quality data
- Analytical approach
- Surveillance tool, detect trend



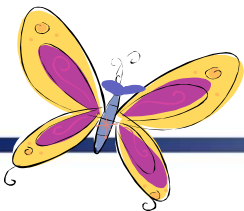
# Objectives

- Apply an epidemiological method to identify risk factors related to fetal and infant loss.
- Establish a surveillance system to monitor indicators related to fetal and infant loss.
- To assist the local health department and community partners in designing evidence-based programs and policy/planning processes to improve birth outcomes



# Methods

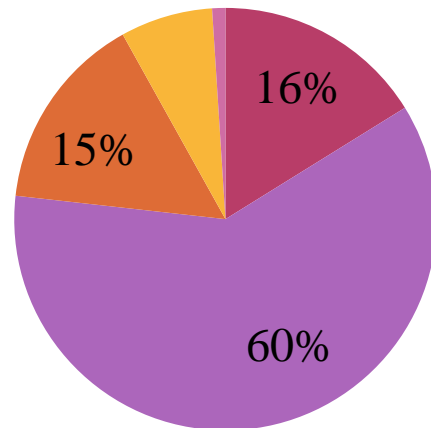
- Step 1: Contact LA County moms 7 to 9 months following a fetal or infant loss; randomly select cases from each SPA with **100% African American mothers**
- Step 2: Mail surveys and conduct telephone follow-up; administered in English and Spanish with translation available. HOPE survey asks a mom's experience prior, during, and right after pregnancy.
- Step 3: Provide \$20-25 gift certificates regardless of whether moms choose to participate



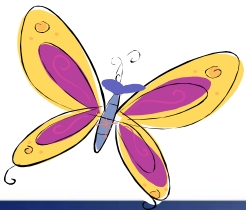
# LA HOPE Demographics

- In FY 2007-2009, we contacted 2,322 moms, 938 responded to the survey.
- Average age of mother at delivery  $32 \pm 9$  Yrs

## Distribution of Race/Ethnicity



- African American
- Hispanic
- White
- Asian/PI



# Preconception Health Conditions

## Preconception Health Conditions

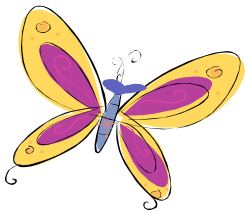
	<b>HOPE*</b>	<b>LAC**</b>
• Uninsured	34%	37%
• Unintended pregnancy	39%	53%
• Did not take multi vitamin	54%	54%

## Prior Obstetrical History

• Prior miscarriage	28%	18%
• Preterm birth	16%	9%
• Low birth weight birth	15%	7%
• Still birth	9%	2%
• Infant death	7%	1%

## Maternal Medical Conditions Prior to Pregnancy

• Overweight or Obese	47%	38%
• Anemia	7%	12%
• Periodontal disease	9%	13%
• High blood pressure	6%	4%
• Diabetes	3%	3%



\* 2007-2009 LA HOPE data

\*\* Mothers who gave live birth in Los Angeles County in 2007, from LAMB Survey





# Psychosocial and Risky Behaviors

## Psychosocial and Risky Behavior Issues During Pregnancy

	<b>HOPE*</b>	<b>LAC**</b>
•		
• Depressed	42%	20%
• Somewhat unsafe or not safe neighborhood	19%	17%
• Smoking	5%	3%
• Exposed to second hand smoke	10%	6%
• Drank alcohol	11%	11%
• <u>The top five stressful life events experienced:</u>		
• Argued more than usual with their partner	27%	30%
• Moved	18%	21%
• Had financial problems	18%	22%
• Family member had to go to hospital	12%	17%
• Someone close died	12%	13%

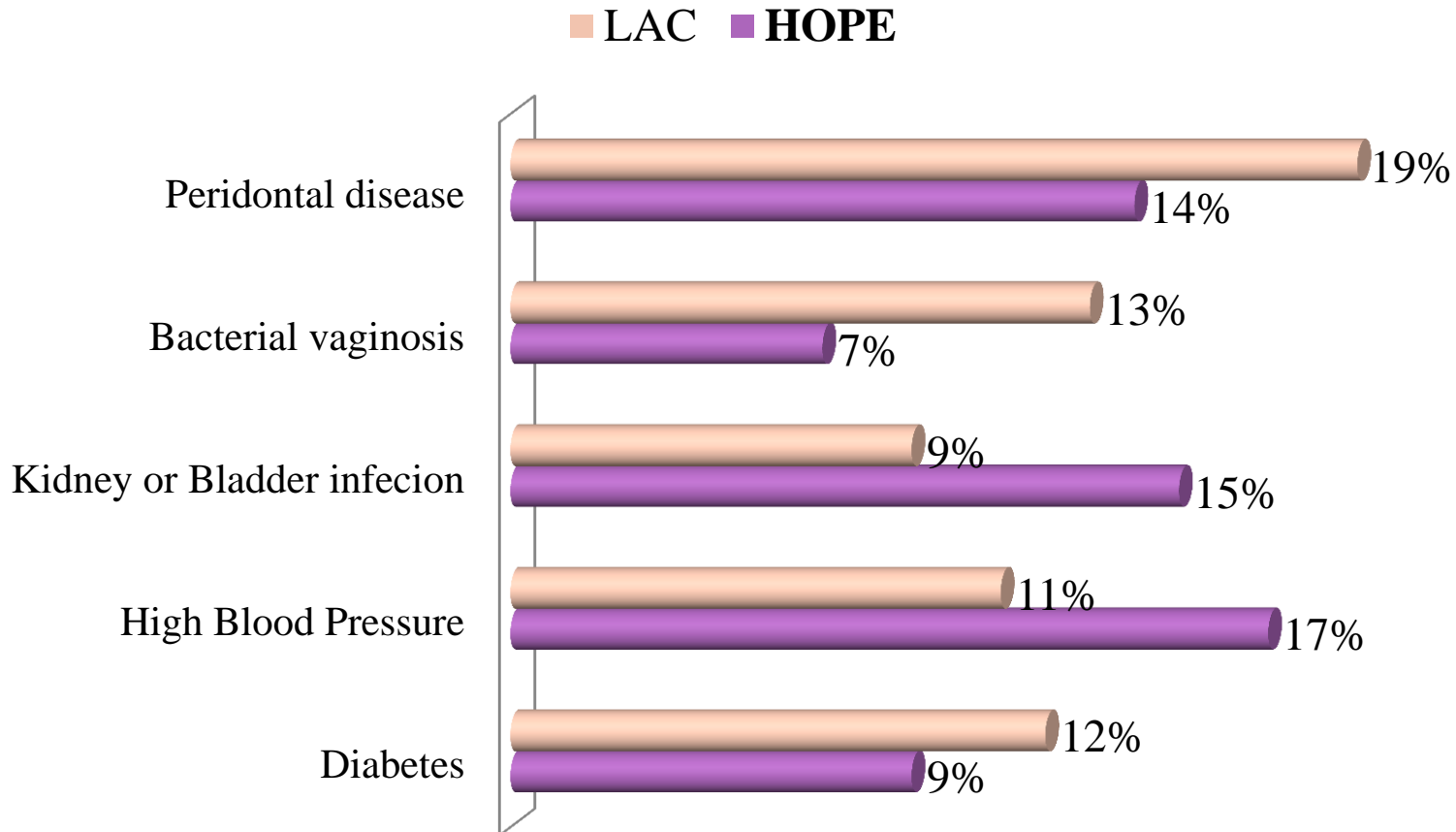
\* 2007-2009 LA HOPE data

\*\* Mothers who gave live birth in Los Angeles County in 2007, from LAMB Survey



# Maternal Medical Conditions During Pregnancy

Percent of women reporting medical conditions during their pregnancy



\* HOPE: 2007-2009 LA HOPE data

\* LAC: Mothers who gave live birth in Los Angeles County in 2007, from LAMB Survey





# Prenatal Care

	HOPE*	LAC**
No prenatal care:	4%	2%
Late onset of prenatal care:	10%	10%

**“I should have gotten prenatal care as soon as I knew I was pregnant. I shouldn’t have cared about people talking.”**

**“I was young and naïve and didn’t think I would have any problems with my pregnancy. I wish I was more informed about what could go wrong.”**

**- LA HOPE Moms**

**“My doctor didn’t provide me with enough medical attention.”**

**“Please provide us with more attention during our pregnancy and post-partum. Take care of the infants when they’re born.”** - LA HOPE Moms



\* 2007-2009 LA HOPE data

\*\* Mothers who gave live birth in Los Angeles County in 2007, from LAMB Survey

# Grief and Bereavement

<b>Grief and Bereavement</b>	<b>HOPE</b>	<b>2007</b>	<b>2009</b>
• Offered bereavement material		77%	78%
• Offered information on support group		66%	73%
• Attended a support group		8%	42%
• Felt religion provided support		50%	52%

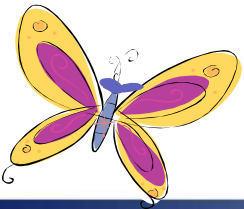
**“Support groups, church support,  
and family have been an important  
part of our healing process.”  
-LA HOPE Mom**



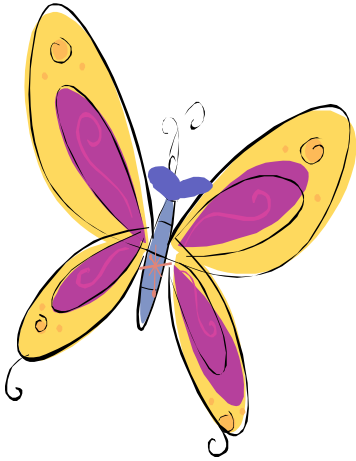
# Where do We Intervene? From Data to Actions



- We shared project findings with community stakeholders, including faith-based organizations, to improve birth outcomes in LA. Together, we are taking many actions:
  - ✓ Promoting **preconception health**, so women can prepare for healthy births before becoming pregnant.
  - ✓ Focusing on assessing the **mental health** of pregnant women and providing referral services to those in need of services.
  - ✓ Promoting awareness of **social determinants of birth outcome disparities** among perinatal health providers.



# Project Recognition



**2009 Model Practice Award Recipient,  
National Association of County & City  
Health Officials (NACCHO)**



## *Special Thanks to:*

MCAH Programs

Data Collection and Analysis

Black Infant health Program

State FIMR Program

And, Of course!! Mothers who completed the surveys !

**“...I hope that my answers could help to prevent the loss of many babies.”**

**“Hopefully this will be helpful to other women who may experience what my husband and I went through.”**

**- LA HOPE Moms**





# Contact Information

Website:

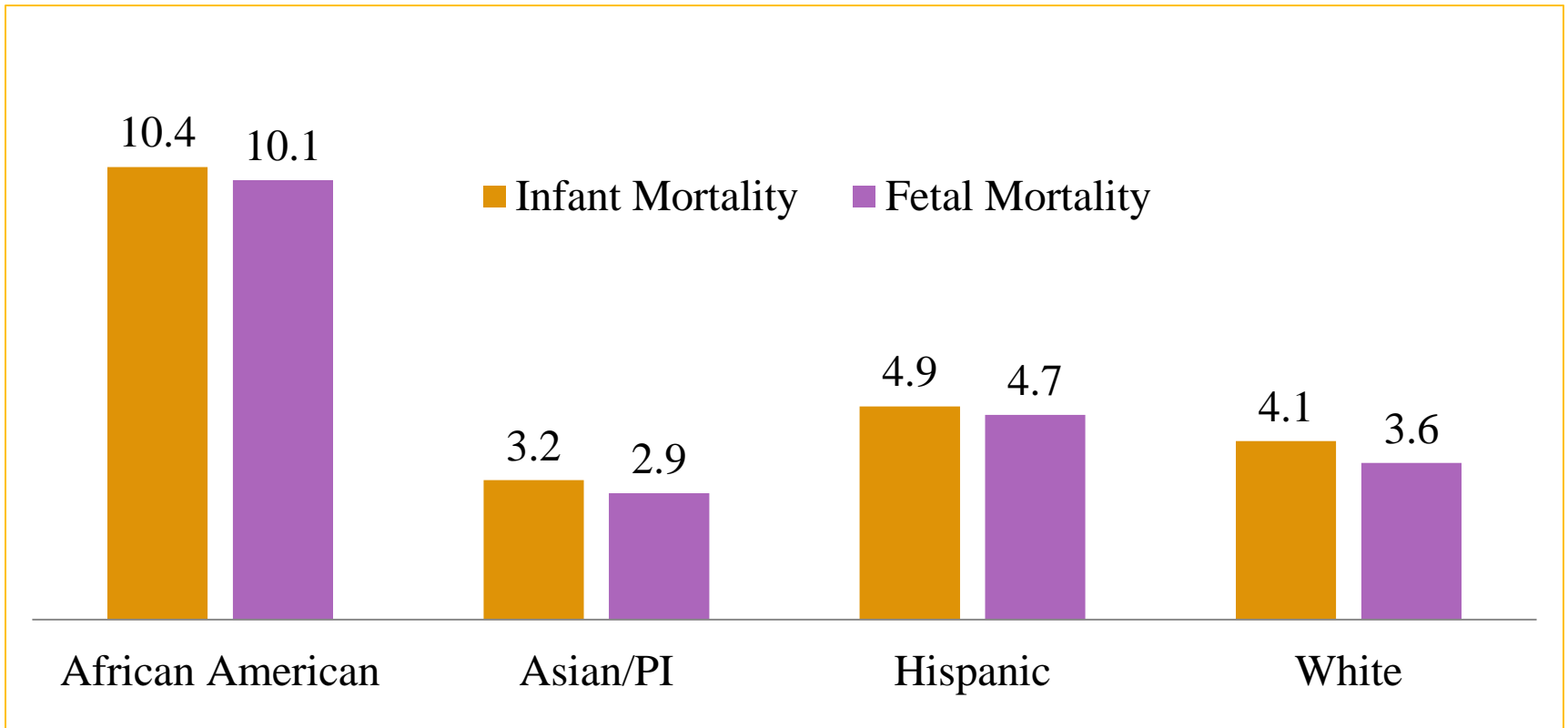
<http://lapublichealth.org/mch/lahope/lahope.html>

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# Infant and Fetal Mortality Rates by Race/Ethnicity LA County, 2009



Infant Mortality: Deaths/1000 Live Births

Fetal Mortality: Deaths/1000 Live Births + Fetal Deaths



# Data Collection Process: HOPE vs. FIMR

	HOPE	FIMR
Background	2006	1994
Design	Annual survey	Case review
Case load /Year	300	44
Standardized tool	Yes	No
Time needed to collect one case info	35-40 minutes	24 hours
Data quality	High	Low



*“Infant mortality is the most sensitive index we possess of social justice.”*

Julia Lathrop, Children’s Bureau, 1913

In the 21th century of United States, it is not fair that a baby’s chance to live is partially determined by his/her race



# Leading Causes of Death for Children by Age Categories, Los Angeles County, 2006

Age	Less than 1	1-4	5-12	13-19
	Congenital malformations, deformations & chromosomal abnormalities	Congenital malformations, deformations & chromosomal abnormalities	Accidents (Unintentional injuries)	Assault (Homicide)
	Disorders Related to short gestation & low birth weight, not elsewhere Classified	Accidents (Unintentional injuries)	Malignant neoplasms	Accidents (Unintentional injuries)
	Other perinatal conditions or conditions originating in the perinatal period	Malignant neoplasms	Congenital malformations, deformations & chromosomal abnormalities	Malignant neoplasms
	Diseases of the respiratory system	Assault (Homicide)	Diseases of the nervous system	Diseases of the nervous system
	Hemorrhagic and hematological disorder of newborn	Diseases of the respiratory system	Assault (Homicide)	Intentional self-harm (Suicide)

Source: California Department of Public Health, Center for Health Statistics, OHIR Vital Statistics Section, 2002-2006

