

Infant Mortality in Alabama

Satellite Conference and Live Webcast
Wednesday, September 15, 2010
2:00 - 4:00 p.m. Central Time

Produced by the Alabama Department of Public Health
 Video Communications and Distance Learning Division

Faculty

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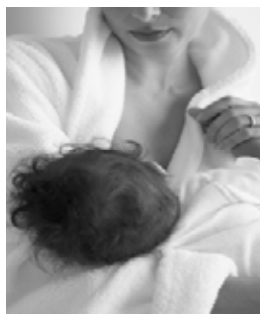
What Is Infant Mortality?

- **Death** of a live-born infant under one year of age
- **Rate** is number of babies born alive that die prior to their 1st birthday
 - Expressed as number of deaths per 1,000 live births
- In Alabama, for 2009, there were 62,476 births and 513 infant deaths

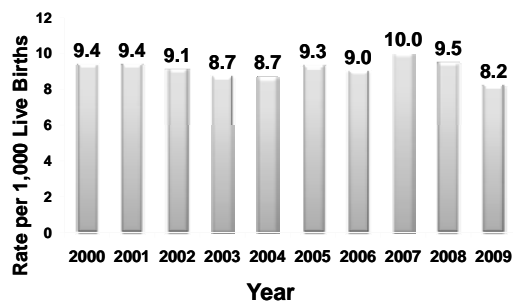
What About Morbidity?

- Mortality is “tip of iceberg”
 - Just a fraction of the overall picture of adverse outcomes
- Morbidity also very significant
 - The survivors who have chronic mental and physical disabilities that affect the child and family for a lifetime

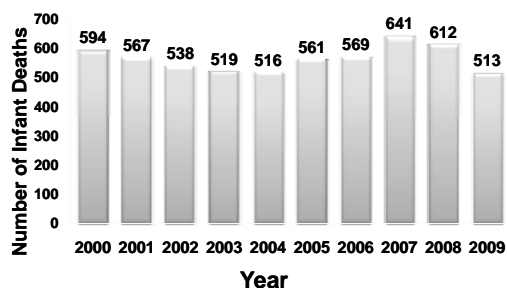
2009 Infant Mortality Data



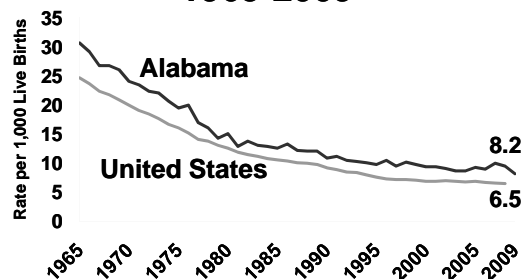
Infant Mortality Rates Alabama, 2000-2009



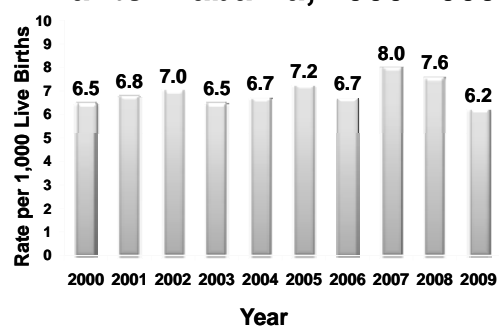
Number of Infant Deaths Alabama, 2000-2009



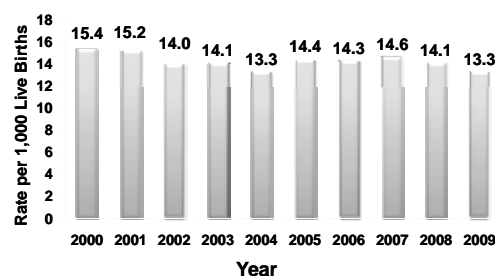
Infant Mortality Rates Alabama and United States 1965-2009



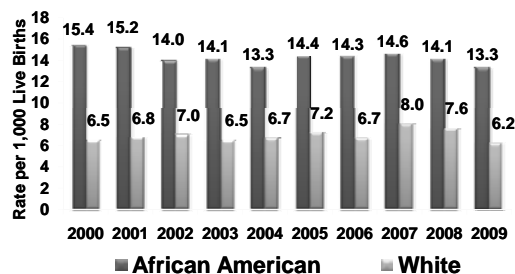
Infant Mortality Rates, White Infants Alabama, 2000-2009



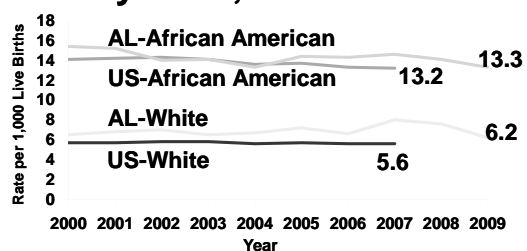
Infant Mortality Rates African American Infants Alabama, 2000-2009



Infant Mortality Rates, by Race Alabama, 2000-2009

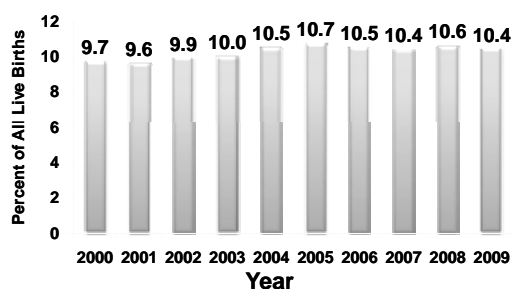


Infant Mortality Rates, Alabama and United States, by Race, 2000-2009

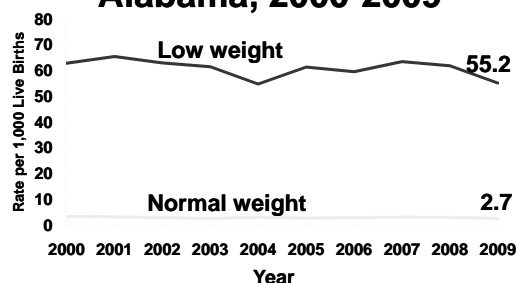


¹ 2008-2009 US rates are not available

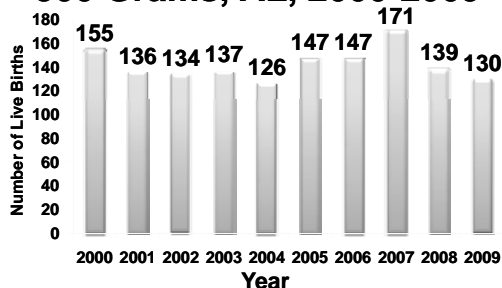
Percent of Low Weight Births Alabama, 2000-2009



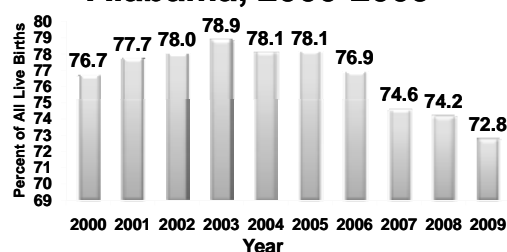
Infant Mortality Rates Low vs. Normal Weight Births Alabama, 2000-2009



Number of Births Weighing Less than 500 Grams, AL, 2000-2009

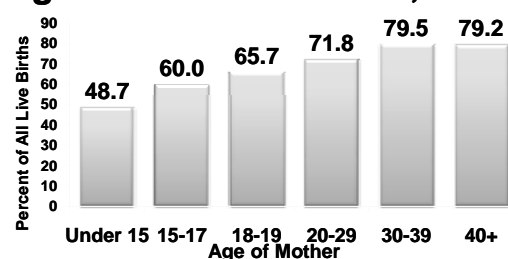


Percent of Births With Adequate Prenatal Care¹ Alabama, 2000-2009



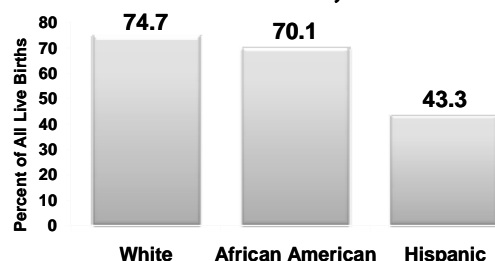
¹ Adequacy of care measured using the Kotelchuck index

Percent of Births with Adequate Prenatal Care¹ by Age of Mother Alabama, 2009



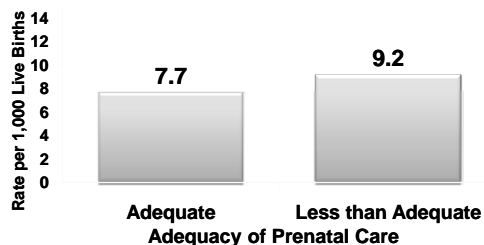
¹ Adequacy of care measured using the Kotelchuck index

Percent of Births with Adequate Prenatal Care¹ by Race Alabama, 2009



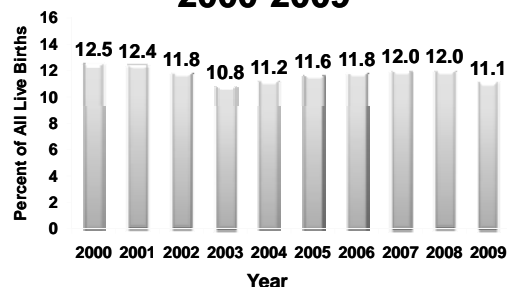
¹ Adequacy of care measured using the Kotelchuck index

Infant Mortality Rates by Adequacy of Prenatal Care¹ Alabama, 2009

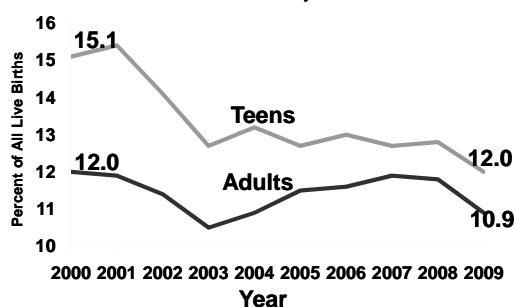


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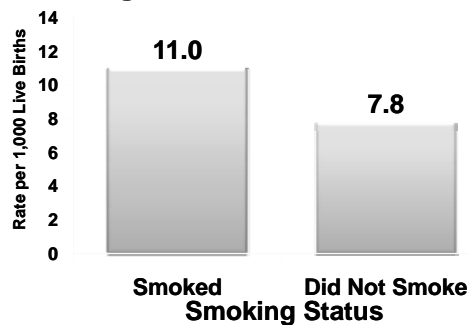
Percent of Births with Maternal Smoking Alabama, 2000-2009



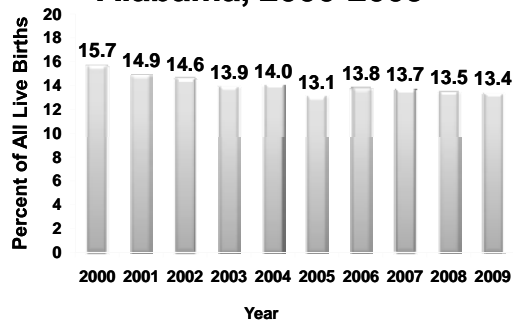
Maternal Smoking by Age of Mother Alabama, 2000-2009



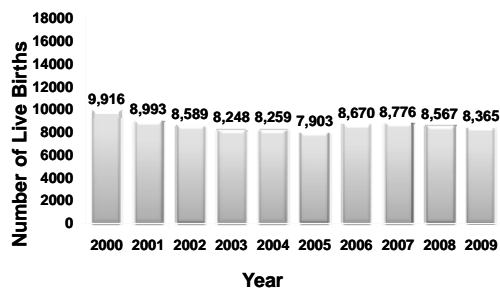
Infant Mortality Rates by Smoking Status, Alabama, 2009



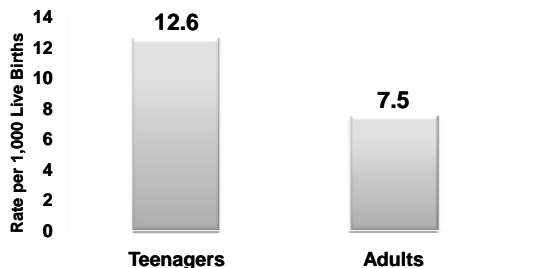
Percent of Births to Teenagers Alabama, 2000-2009



Number of Teen Births Alabama, 2000-2009

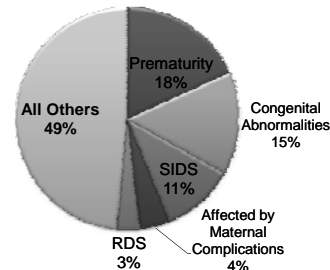


Infant Mortality Rates Teenagers vs. Adults Alabama, 2009



Leading Causes of Infant Death in Alabama, 2009

(n = 513)



Racial Disparities: Ten Leading Causes of Infant Death in Alabama 2003-2007



Racial Disparity of Infant Mortality Rates of Ten Leading Causes Odds Ratios (African American vs. White), AL, 2003-2007

Rank	Cause of Death (ICD-10 Code)	Black vs. White*
1	Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)	1.22
2	Disorders related to short gestation and low birth weight, not elsewhere classified (P07)	3.14
3	Sudden infant death syndrome (R95)	1.37
4	Respiratory distress of newborn (p22)	1.95
5	Accidents (V01-X59)	1.63

* White infant mortality rate was used as a reference
 Bold number indicates a statistically significant difference between black and white

Racial Disparity of Infant Mortality Rates of Ten Leading Causes Odds Ratios (African American vs. White), Alabama, 2003-2007

Rank	Cause of Death (ICD-10 Code)	Black vs. White*
6	Newborn affected by maternal complications of pregnancy (P01)	3.01
7	Bacterial sepsis of newborn (P36)	2.17
8	Newborn affected by complications of placenta, cord and membranes (P02)	3.30
9	Diseases of the circulatory system (I00-I99)	1.62
10	Chronic respiratory disease originating in the perinatal period (P27)	4.41

* White infant mortality rate was used as a reference
 Bold number indicates a statistically significant difference between black and white

Alabama Initiatives



National Fetal and Infant Mortality Review Program



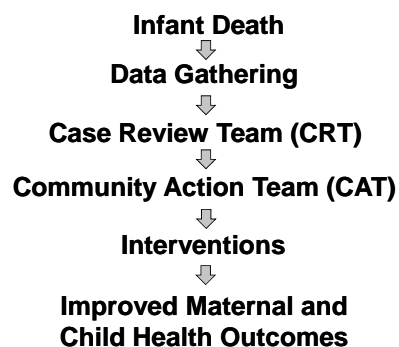
National Fetal and Infant Mortality Review Program

- Collaborative effort
- Began in late 1980's
- More than 220 programs
- 40 states, the District of Columbia, Puerto Rico, and the Virgin Islands
- 15 statewide programs

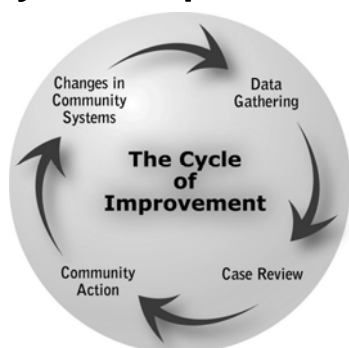
FIMR Goals

- To describe significant social, economic, cultural, safety, health and systems factors that contribute to mortality
- To design and implement community-based action plans built upon information obtained from the reviews

FIMR Model - ACOG Guidelines



Cycle of Improvement



Key FIMR Concepts

- Systematic evaluation of individual cases
- Identification of a broad range of factors
- Inclusion of information not available through routine quantitative methods
- Sentinel events

Key FIMR Concepts

- Avoidance of preventable/non-preventable classifications of deaths
- Avoidance of blame
- Two-tiered process
 - Analytic and action process
- Feedback mechanism
- Multi-disciplinary involvement

FIMR Process

- Helps communities prepare and deliver culturally appropriate interventions to improve service systems and resources for their multi-ethnic populations



Alabama Fetal and Infant Mortality Review Program

- Implemented January 21, 2009
- Alabama Medicaid Agency
- Statewide

BENEFITS OF FIMR:

- Engage and expose communities to preventable deaths
- Identify opportunities for emergency partnerships
- Facilitate the grieving process for families and communities and support systems
- Enhance understanding of community needs by assessing gaps while grieving
- Identify and address causes through cooperative programming and joint funding
- Engage existing service delivery systems and the capacity of various providers to individual, professional, family and cultural needs for bereavement, community-based engagement and local health needs
- Reduce gaps in care
- Ultimately reduce fetal and infant mortality

FIGURE 10:

A documented method of gathering critical information was published for other mortality and monitoring systems:

- A working system
- A working system that describes changes in health care services system
- A source of programming and public health functions, such as assessment, consultation, quality assurance and policy development
- An in-depth process that assesses the patients and issues involved and find out where death
- A collaborative, action-oriented, community-based approach that links to regional services and community resources for addressing families
- An opportunity for public/private partnerships

FIGURE 10 NOTE:

- A research study
- A research study
- A solution for using community and mortality process
- A guide for families in a complex problem
- A mechanism for ongoing issues or responsibility for one death

ALABAMA FETAL INFANT MORTALITY REVIEW PROGRAM

A Guide to the Fetal Infant Mortality Review (FIMR) Program

— Jane M. Korman, Director, National FIMR Program Office

ADPH

The Alabama Department of Public Health would like to acknowledge the Centers for Disease Control and Prevention (CDC) and the National FIMR Program in developing this brochure.

The National FIMR is a collaborative effort of the American College of Obstetrics and Gynecology (ACOG) and the National Maternal and Child Health Bureau (NMCH).

Perinatal Regions



CRT Findings

- Inadequate grief support after a fetal or infant death for mothers and their families



CAT Responses

- Bereavement Protocol and Educational Programs
- Facebook



CRT Findings

- Mothers who delivered preterm were not referred to family planning



CAT Response

- Protocol was implemented
 - All patients that deliver are referred to family planning regardless of outcome of the pregnancy

