



DIME & MIME: Bringing IPC to Mississippi

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Agenda

Discuss IPC impact on infant mortality

- MS infant mortality & disparities
- Impact of very low birthweight (VLBW)
- MS chronic disease & morbidity
- Need for IPC

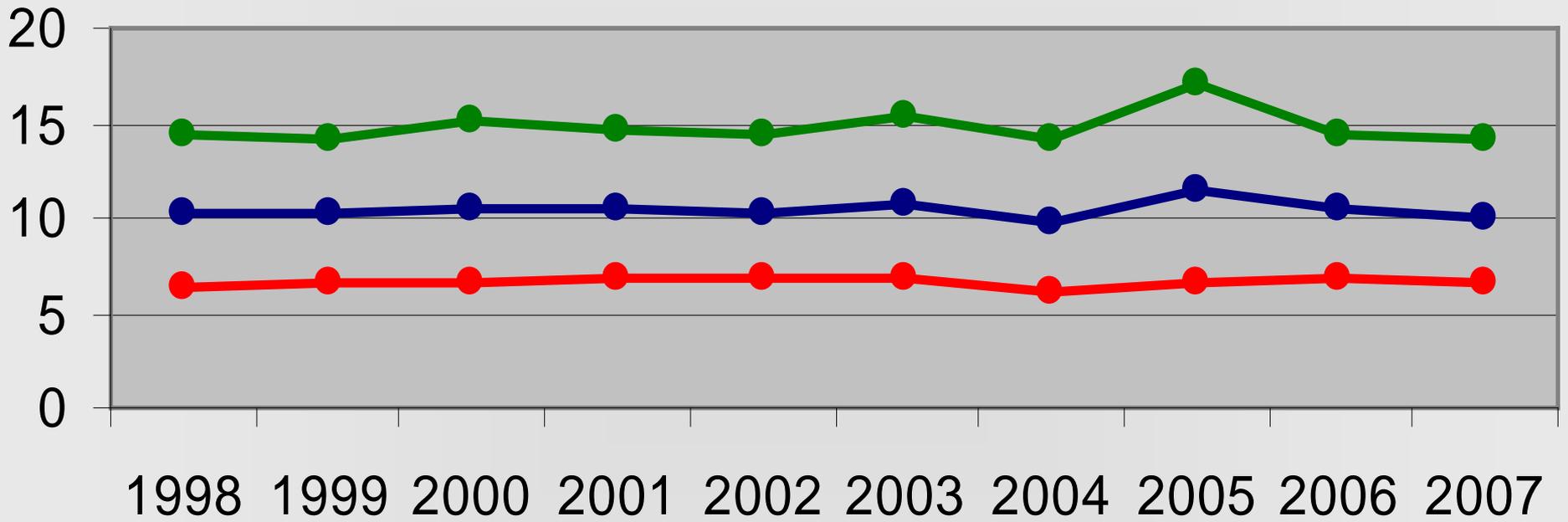
Identify components of an IPC

- CDC recommendations for IPC
- DIME & MIME intervention package
- Problems and solutions

Discuss health policy & practice

- DIME & MIME project evaluation
- Goal for policy change
- Strategies to effect policy change

Infant Mortality, Mississippi, 1998-2007



—●— Total —●— White —●— Nonwhite

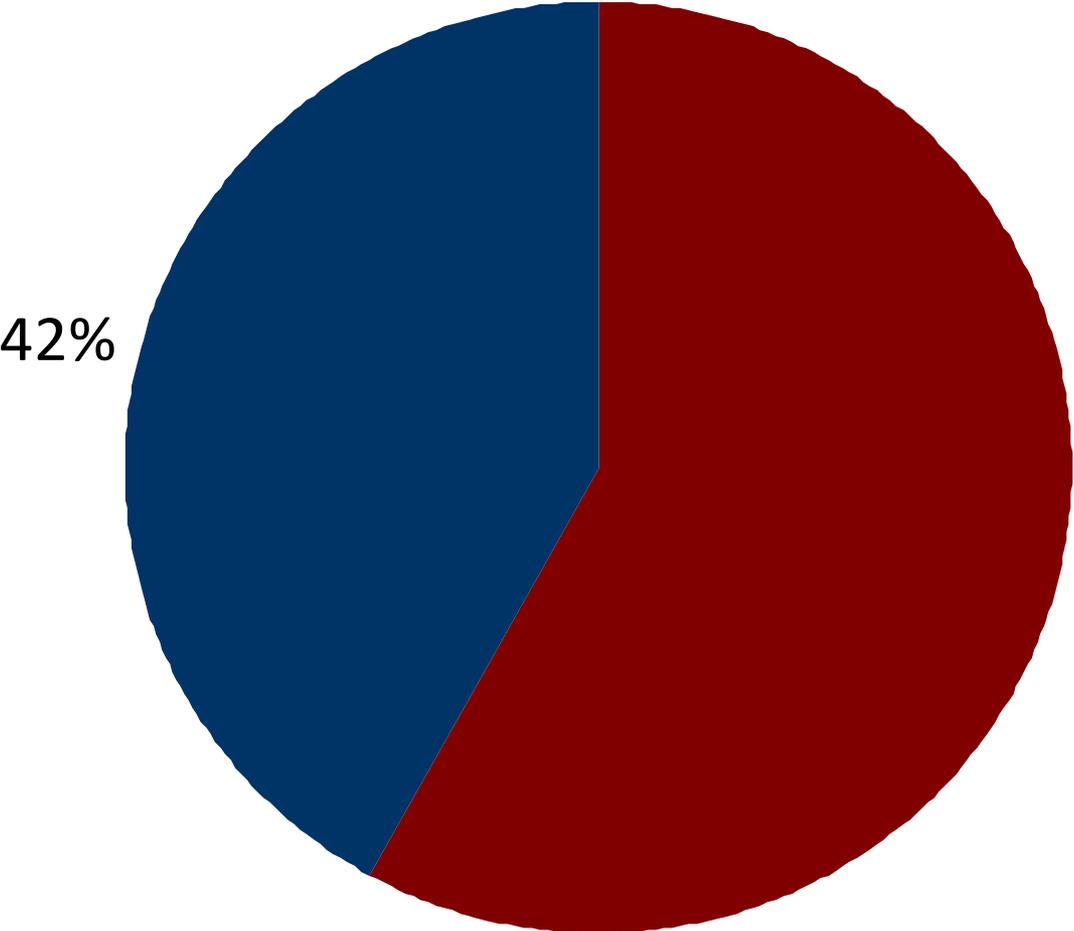
White & Non-white rates

	1998	1999	2000	2001	2002
Total	10.2	10.2	10.6	10.5	10.3
White	6.4	6.7	6.7	6.9	6.8
Nonwhite	14.5	14.1	15.1	14.7	14.4

	2003	2004	2005	2006	2007
Total	10.7	9.7	11.4	10.5	10.1
White	6.8	6.1	6.6	6.9	6.6
Nonwhite	15.4	14.2	17.0	14.4	14.1



Infant Mortality by period of death, Mississippi 2007

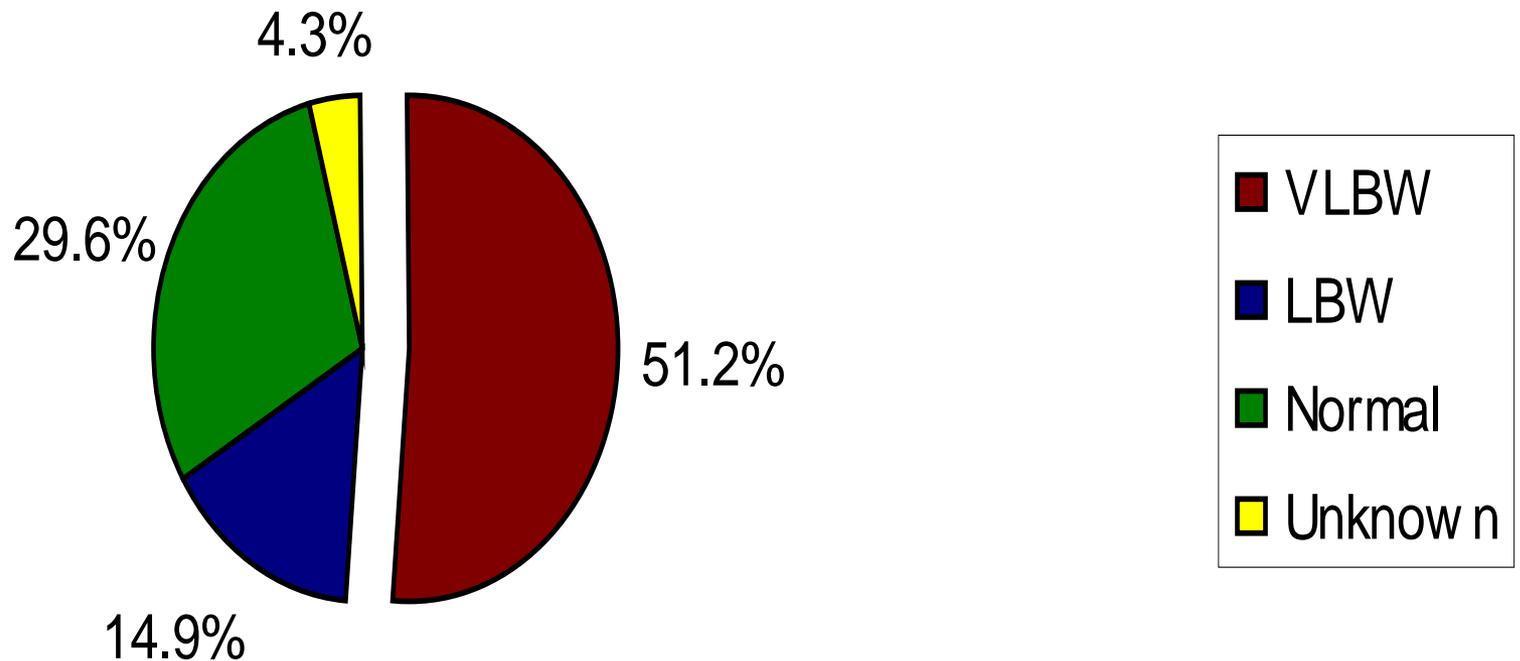


58%

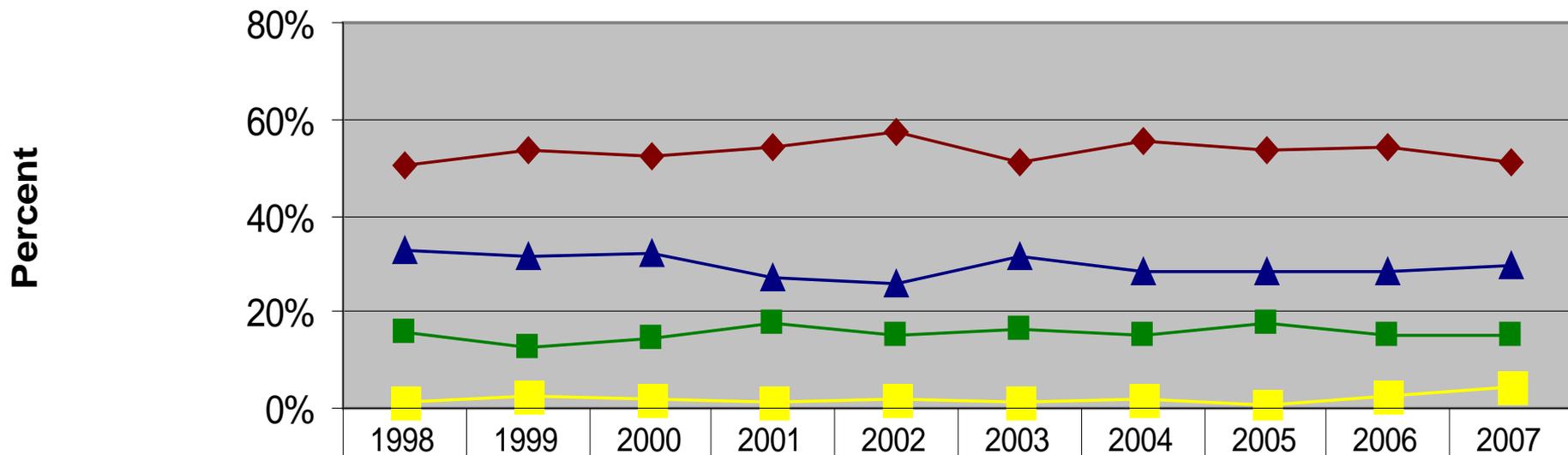
■ Neonatal

■ Postneonatal

Percent of infant deaths by birth weight, Mississippi, 2007



Average Percent of Infant Deaths by birth weights, Mississippi, 1998-2007



< 1,500 g	50%	54%	52%	54%	57%	51%	55%	54%	54%	51%
1,500-2,499 g	16%	12%	14%	17%	15%	16%	15%	18%	15%	15%
2,500+ g	33%	31%	32%	27%	26%	32%	28%	28%	29%	30%
Unknown n	1%	3%	2%	1%	2%	1%	2%	1%	2%	4%

< 1,500 g
 1,500-2,499 g
 2,500+ g
 Unknown n

Findings from Linked Data

- Retrospective cohort study using linked birth & death certificate files for Mississippi infants, 1996-2003 (N=341,780).
- A population of (n=297,418) non-Hispanic white & black singleton live-born infants studied
- Assessing relationship between chronic conditions and IM, LBW, PTB

Findings from Linked Data

- **Maternal demographics**

- Younger
- African American
- Lower education
- Lower income
- Unmarried

- **Maternal health**

- Smoking
- Diabetes
- Obesity
- Hypertension
- Heart disease

Kotelchuck Index

- Evaluates prenatal care based on timing & number of visits
- Adequate prenatal care had lower infant mortality rate than inadequate group
- “Adequate plus” prenatal care had much higher infant mortality rate than adequate group (what does this tell us?)
- Mississippi boasts of nearly 85% rate of early entry into care

Need for IPC

Problem: Many Mississippi babies die very small & very young despite prenatal care

Hypothesis: Mississippi women are not healthy enough to achieve a full term, normal weight delivery

Solution: Intervention PRIOR to conception

Method: IPC for small population with highest risk for poor delivery outcomes

CDC Recommendations for IPC

- **Improve knowledge, attitudes, behaviors of men & women related to preconception health**
- **Assure all women of childbearing age in the U.S. receive preconception care services (i.e., evidence-based risk screening, health promotion, and interventions) enabling entry to pregnancy in optimal health**
- **Reduce risks indicated by previous adverse pregnancy outcome through interventions during the interconception period, to prevent or minimize health problems for a mother and her future children**
- **Reduce the disparities in adverse pregnancy outcomes**

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- **Preconception / interconception care pilot programs**
- **Rural vs. Urban communities**
- **Delta Infant Mortality Elimination**
- **Metro Infant Mortality Elimination**

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Partnering organizations

- **UMMC – principal recruitment site & service provider.**
- **Healthy Linkages – referral service for identification of medical homes.**
- **Division of Medicaid – data source.**
- **World Health Organization Collaborating Center for Reproductive Health (WHO/CC/RH) – technical assistance.**
- **Community health centers – primary care medical homes.**

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IPC intervention package

- **Individualized interpregnancy care plan based on assessments of medical/ social risks for subsequent poor pregnancy outcomes;**
- **Provision of primary health care & dental services in accordance with care plan for 24 months;**
- **Assistance in achieving a woman's desire for subsequent pregnancies & need for optimum child spacing (ideally 18-20 months);**
- **Provision of appropriate social services & community outreach in each woman's community.**

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Problems & solutions

- Expansive & rural geographical area
- Limited funding
- Limited resources
- Communication
- Transportation

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Role of Health Department

- **Lead agency & grant applicant**
- **Oversight & primary leadership for the project**
- **Contractual & logistical arrangements**
- **Local level support services:**
 - **Case management & outreach**
- **Data analysis & evaluation**
- **Policy development**

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Project evaluation

- **On-going surveillance combined with evaluation at the project's end**
- **Acceptability and delivery of the IPC service package indicators followed on an on-going basis**
- **Health & Reproductive outcomes evaluated at project's end**
- **Cost-benefit analysis to compare cost savings to costs of program**

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Goal for policy change

- **Medicaid lost 6 weeks post-partum**
- **No primary care during interim before subsequent pregnancies so poor chronic disease management**
- **Goal: Primary care for poverty-level Mississippi women who deliver VLBW**
- **Format: Medicaid waiver**

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Strategies to effect policy change

Cost analysis

- Reduction in Medicaid costs
 - >60 % of Mississippi births covered by Medicaid
- High risk pregnancy care
- High risk infant care
- Long term morbidities & developmental delay
- Low number of qualified women (n= ~800)
- Low cost of primary care

Questions?



Thank you