




The Strategy to Improve Birth Outcomes in Baltimore City

Questions that guided the Birth Outcomes Strategy

- How big a problem is infant mortality in Baltimore City?
- What do we know about improving birth outcomes?
- What strategies can be adopted to address this problem?
- Which partners are currently involved and needed?
- What are the next steps?

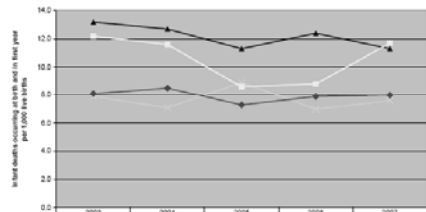


A Public Health Crisis

- In 2007, 625 babies under the age of one died in Maryland
- In 2007, 112 babies died in Baltimore City
- 95% were African-American
- Baltimore City has the second highest rate of infant death in Maryland

Infant Mortality Rates: Maryland & Baltimore

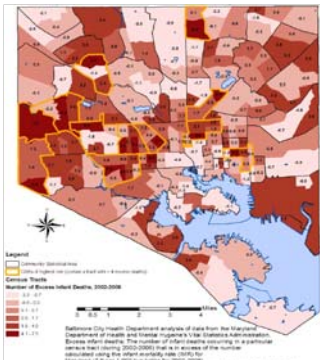
Infant Mortality Rates Across Maryland 2003-2007



	2003	2004	2005	2006	2007
Baltimore City	13.2	12.7	11.3	12.4	11.3
Baltimore County	7.9	7.1	8.9	7.5	7.6
Prince George's County	12.2	11.6	8.6	8.8	11.7
Maryland	8.1	8.5	7.2	7.9	8.2

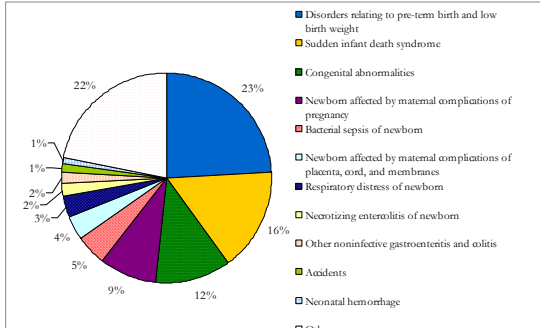
Source: Maryland Department of Health and Mental Hygiene Prepared by the Baltimore City Data Collaborative August 2008

Excess Number of Infant Deaths by Census Tract, Baltimore City, 2002 - 2006



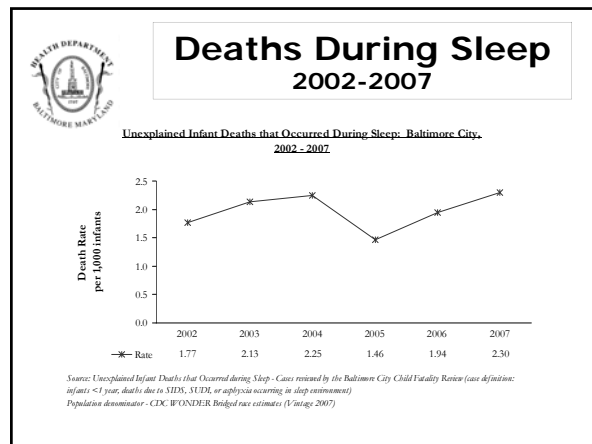
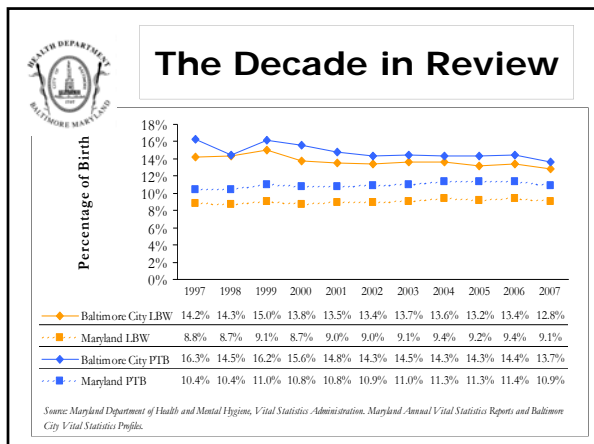
Baltimore City Health Department analysis of data from the Maryland Department of Health and Mental Hygiene's Vital Statistics Administration. Results show that the number of infant deaths occurring in a particular census tract during 2002-2006 was 20% or more above the number expected using the urban mortality rate for 2002-2006. Legend: 20% or more above expected rate, 10% or more above expected rate, 5% or more above expected rate, 0% to 4% above expected rate, 0% to 4% below expected rate, 5% or more below expected rate, 10% or more below expected rate, 20% or more below expected rate.

Leading Causes of Infant Mortality, Baltimore City, 2005-2007



- Disorders relating to pre-term birth and low birth weight (23%)
- Sudden infant death syndrome (16%)
- Congenital abnormalities (12%)
- Newborn affected by maternal complications of pregnancy (9%)
- Bacterial sepsis of newborn (5%)
- Newborn affected by maternal complications of placenta, cord, and membranes (4%)
- Respiratory distress of newborn (4%)
- Necrotizing enterocolitis of newborn (3%)
- Other noninfective gastroenteritis and colitis (2%)
- Accidents (2%)
- Neonatal hemorrhage (1%)
- Other (1%)

Source: Baltimore City Health Department analysis of data from the Maryland Department of Health and Mental Hygiene, Vital Statistics Administration.



- ### Factors Affecting Poor Birth Outcomes
- Health of the mother and father before conception
 - Medical and social support during pregnancy
 - Access to critical knowledge and services after birth

Factors Affecting Poor Birth Outcomes

Stage of Care	Pre-Pregnancy	Pregnancy	Post-Pregnancy
	Preconception	Prenatal & Obstetric	Postpartum & Neonatal
Modifiable Determinants of Adverse Outcomes		Smoking Substance abuse Poor nutrition/obesity Psychosocial stress Domestic violence Infection/ Sexually Transmitted Infections Underlying Chronic Illness Lack of Health Insurance Coverage	
Underlying Determinants of Poor Reproductive Health		Poverty Environmental exposures Poor housing Racism Genetic factors	
Interventions Specific to Stages	<ul style="list-style-type: none"> Planned pregnancies: <ul style="list-style-type: none"> - Wanted & timed - Spaced Good nutrition Adequate folate High quality primary care STD treatment 	<ul style="list-style-type: none"> High quality prenatal care Access to high-risk obstetrics Home visiting for high-risk pregnancies 	<ul style="list-style-type: none"> Breastfeeding Safe sleep Adequate nutrition Immunizations

- ### High-Impact Service Areas
- No "quick fix" solution for poor birth outcomes
 - Evidence-based research indicates certain high-impact service areas lead to improved birth outcomes


High-Impact Service Areas

(1) Primary health care in a medical home	(7) Smoking cessation
(2) Obstetric care	(8) Family planning
(3) Home visiting	(9) Nutrition support
(4) Drug and alcohol treatment	(10) Breastfeeding promotion
(5) Domestic violence Interventions	(11) Safe sleep education
(6) Mental health care	



Gaps in Current Efforts to Improve Birth Outcomes

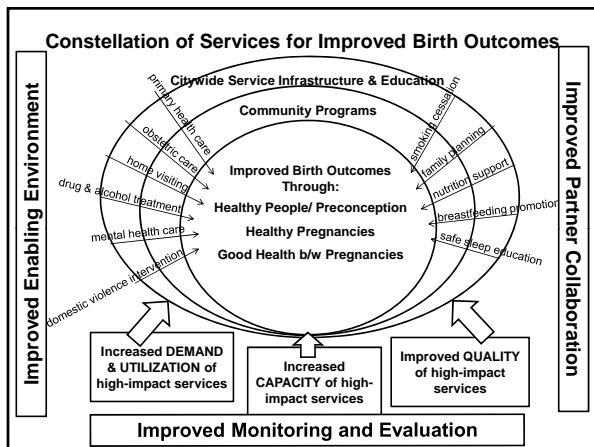

- Individual initiatives are funded inadequately and separately
- Poor coordination of services
- Lack of adequate primary health care
- Lack of health insurance
- Lack of minimum standard of care
- Limited community mobilization to promote healthy behaviors prior to or between pregnancies



Intended Outcomes

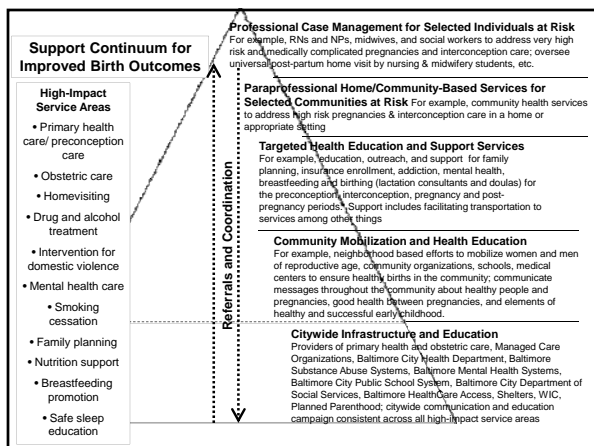

Reduction in the:

- Rate of pre-term births by at least 10% (283 fewer preterm babies)
- Rate of low birth weight infants by at least 10% (259 fewer low birth weight babies)
- Number of deaths from unsafe sleep by at least 30% (12 infants)


Increase Demand and Utilization of Services

- Citywide education and communications campaign
- Community-based Programs in Targeted Neighborhoods
- Provide evidence-based interventions to promote behavior change and increase demand for high impact services
- Ensure persons of all ages are aware of and have access to the eleven high impact services

Increase Capacity

- All eleven high impact services need to operate at full capacity
- Assessment of deficiencies in the high impact services area including: obstetric care, drug and alcohol treatment for women, mental health treatment for women by city agencies
- Agencies will develop and implement a plan to address the deficiencies and directly link efforts with community-based programs




Improve Quality

High impact services need to be high quality


Particular focus will be on:

- Health Services for Adolescents and Young Adults
- Services Specific to Women
- Services for Mother and Infant After Delivery



Imperative: A City-wide Coordinated Effort

- Citizens and leaders
- Mayor's Office
- Health Department
- The Family League of Baltimore City, Inc.
- Baltimore HealthCare Access, Inc.
- Baltimore Substance Abuse Systems, Inc.
- Managed Care Organizations
- Housing
- Dept of Social Services
- Baltimore Mental Health Systems, Inc.
- Pediatricians/Adolescent physicians/Obstetricians
- Home visiting and community outreach programs
- Schools
- Faith-based organizations
- Businesses
- Public Safety Departments



Next Steps

- Convene Steering Committee
- Award contracts to Evaluation Vendor and Communications Vendor
- Develop and oversee logic framework and detailed implementation plan and framework
- Engage city agencies in assessing capacity and quality of services
- Issue Community Program Request for Proposal so that programs begin October 2009