

Adapting FIMR to Improve Perinatal Systems of Care in Baltimore City

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

Faculty

Meena Abraham, DrPH, MPH
Director of Epidemiology Services
Baltimore City Health Department

Baltimore City: “It’s About Our Neighborhoods”

- 271 neighborhood statistical areas
- 55 community statistical areas
- 26 zip codes

A Snapshot of Baltimore City: by the Numbers (2010)

Characteristic	Baltimore City	Maryland
Total Population	620,961 (10.8%)	5,773,552
White	29.6%	58.2%
Black	63.7%	29.4%
Other	6.7%	12.4%
Below Poverty Level	21.3%	8.6%
Births	8,945	73,783

Life Expectancy at Birth

- Baltimore City 2008-10
 - 73.3 years
 - CSA Range = 20 years
- Maryland 2008-10
 - 78.7 years

Healthy Baltimore 2015: A Focus on Social Determinants of Health

- Priority areas
 - Promote access to quality health care for all
 - Be tobacco free
 - Re-design communities to prevent obesity
 - Promote heart health

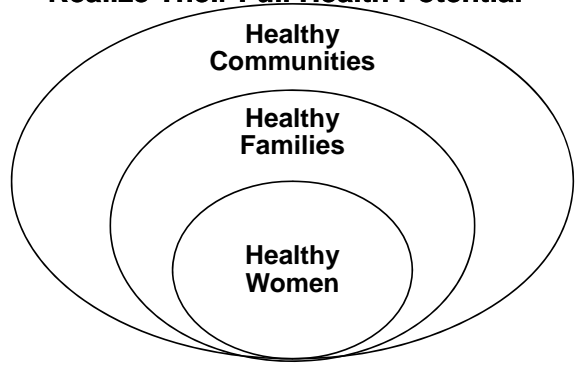
Healthy Baltimore 2015: A Focus on Social Determinants of Health

- Stop the spread of HIV and other sexually transmitted infections
- Recognize and treat mental health care needs
- Reduce drug use and alcohol abuse

Healthy Baltimore 2015: A Focus on Social Determinants of Health

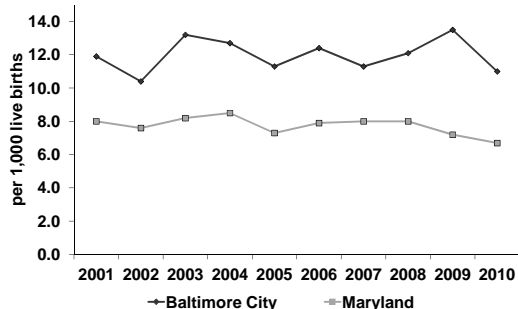
- Encourage early detection of cancer
- Promote healthy children and adolescents
- Create health promoting neighborhoods

Baltimore: "A City Where All Residents Realize Their Full Health Potential"

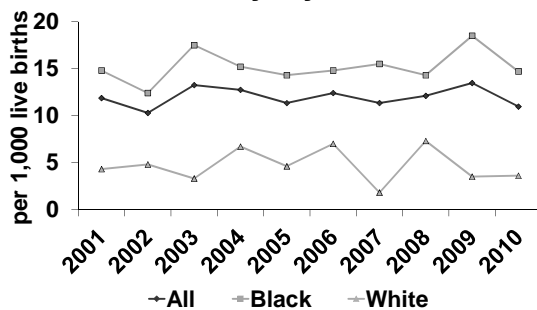


Baltimore City FIMR: Foundation for Improving Perinatal Systems of Care

Trends in Infant Mortality: Baltimore City and Maryland



Trends in Infant Mortality by Race



Baltimore City FIMR

- Established in 1993
- Tri-partnership
 - Baltimore City Health Department
 - Baltimore City Healthy Start
 - Maryland State Medical Society
- Developed process for conducting FIMR

Baltimore City FIMR

- Engaged health and human service providers and community stakeholders in improving perinatal systems of care

Key Findings

- Women have multiple risk factors for poor pregnancy outcome
- Women are not always aware of their risks or ways to reduce them
- Providers and the women they care for are often not aware of support services and community resources

Key Findings

- Opportunities exist to improve services and increase awareness of ways to reduce risks

Baltimore's Four Priorities for Infant Survival

1. Follow-up care for women with poor pregnancy outcome to reduce repeat poor outcomes
2. Perinatal infections screening and re-screening for early diagnosis and treatment

Baltimore's Four Priorities for Infant Survival

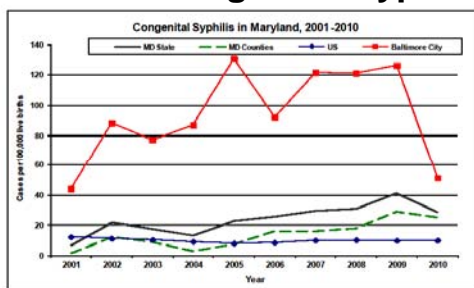
3. Family planning and preconception / inter-conception care for adequate pregnancy interval and improved maternal health status
4. Adequate utilization of prenatal care for early and continuous care

Adaptation of FIMR in Baltimore

- Perinatal Outcomes
 - I. Congenital Syphilis
 - II. Fetal Alcohol Spectrum Disorder
 - III. Perinatal HIV Transmission

I. Congenital Syphilis

Trends in Congenital Syphilis



NOTE: MD State - 23 Maryland Counties and Baltimore City; MD Counties - 23 Maryland Counties (excludes Baltimore City); US - United States.
 *US 2010 rate not yet published; 2009 rate used.
 Source: Center for Sexually Transmitted Infection Prevention, Maryland Department of Health and Mental Hygiene, Baltimore City Health Department, and Maryland Department of Planning

Key Findings

- 3rd trimester repeat syphilis screening effective
- Syphilis testing at delivery essential for women
 - With no prenatal care
 - Not tested at 3rd trimester visit
 - Infected after 3rd trimester screening

Key Findings

- Re-infected after 3rd trimester screening
- Opportunity for improved coordination between providers, and between providers and health department
- Need to educate providers regarding health department resources

Sustainability

- Case review meetings held annually by Baltimore City FIMR
- Case management coordinated between maternal and infant nursing and STD staff
- Women with syphilis followed through delivery, not just treatment completion

Sustainability

- Congenital syphilis cases are reviewed by all FIMR programs in Maryland

II. Fetal Alcohol Spectrum Disorder (FASD)

Fetal Alcohol Spectrum Disorder (FASD)

“Of all the substances of abuse (including cocaine, heroin, and marijuana), alcohol produces by far the most serious neurobehavioral effects in the fetus.”

- IOM Report to Congress, 1996

Substance Use in Pregnancy

- Fetal and infant deaths
 - Alcohol use – 10%
 - Cigarette use / smoking – 28%
 - Drug use – 25%
 - One or more substance use – 39%

Substance Use in Pregnancy

- Maryland PRAMS 2001-2003
 - 19% not asked about alcohol use during PNC
 - 50% used alcohol in 3 months before pregnancy

Two Phases of Project Activity

1. Identify opportunities for prevention within existing service systems
 - Analyzed Baltimore City Healthy Start client enrollment data and conducted focus groups

Two Phases of Project Activity

- 2. Identify contributors to alcohol use during pregnancy
 - Conducted case reviews of women with alcohol use during pregnancy in partnership with Sinai Hospital

Key Findings

- 27% pregnant Healthy Start enrollees used alcohol around conception or while pregnant
- Alcohol use occurs with other substance use
- Women not routinely screened for alcohol use in pregnancy
 - More emphasis on illegal drug use

Key Findings

- Providers and pregnant women lack awareness of range of effects from alcohol exposure during pregnancy
- Poor relationship with baby's father as stressor
- Alcohol use instead of drugs because of Child Protective Services reporting

Sustainability

- Identified opportunities for prevention in Healthy Start intake and case management
- Educated Healthy Start staff about FASD

Sustainability

- Formation of Coalition for FASD Prevention
- Maryland Coalition for FASD Prevention established

III. Perinatal HIV Transmission

Perinatal HIV Exposure

- **Baltimore-Towson MSA ranked third nationally for rates of adults living with HIV disease (2009)**
- **Majority (80%+) of HIV-exposed births occur in Baltimore City**

Perinatal HIV Exposure

- **17% of post-partum women participating in the Maryland PRAMS survey reported that no healthcare provider had talked with them about HIV during pregnancy (2001-2006)**

Reported Perinatal Exposures in Maryland

Indicator	2006	2007	2008	2009	2010
HIV-infected women of reproductive age	6,784	7,144	7,368	7,351	7,216
Reported Perinatal HIV Exposures	176	176	206	170	122
Confirmed Perinatal HIV Transmissions	3	7	6	3	2
Perinatal HIV Transmission Rate	1.7%	4.0%	2.9%	1.8%	1.6%

Source: Enhanced Perinatal Surveillance, Maryland DHMH

Baltimore FIMR-HIV Project

- **National partners**
 - **CDC, ACOG, and CityMatCH**
- **Local partners**
 - **Maryland State Medical Society and Sinai Hospital of Baltimore, with participation of Baltimore City FIMR**

Baltimore FIMR-HIV Project

- **In 2010, nine cases of perinatal HIV exposure reviewed to examine opportunities for HIV testing and linkage to care for births occurring to HIV positive women in Baltimore City**

Baltimore FIMR-HIV Findings

- **Inconsistent documentation of patient education**
- **Inconsistent family planning education/counseling**
- **Poor utilization of partner services**
- **Lack of support systems due to HIV/AIDS stigma**

Baltimore FIMR-HIV Findings

- **Need for intensive case management and support services for engagement in care and treatment adherence**
- **Domestic violence and substance abuse issues**
- **Housing and transportation needs**

Baltimore FIMR-HIV Sustainability

- **Baltimore FIMR-HIV Team established**
- **IRB approvals at several hospitals**
- **Included in CDC HIV Prevention FOA**
 - **Developing plan to coordinate resources and tasks between city and state for case reporting and to conduct reviews**

Take Away Points

Adapting FIMR: Key Steps

- **Sentinel event**
 - **“Reportable” health outcome**
- **Adapt FIMR process and materials to review the specific sentinel event**
- **Engage key partners**
 - **Hospitals, programs, service providers, etc. in project**

Adapting FIMR: Key Steps

- **Ensure appropriate expertise available to review case summaries and participate in case review team deliberations**
- **Provide training on FIMR process**
- **Provide training on standards of care for the sentinel event under review**