

# PROJECT IMPACT

2005-2006 Community Report

**Project Impact** is a fetal and infant mortality review (FIMR) project for Baker, Clay, Duval, Nassau and St. Johns Counties. Its goal is to reduce infant mortality by gathering and reviewing detailed information to gain a better understanding of fetal and infant deaths in Northeast Florida. The project examines cases with the worst outcomes to identify gaps in maternal and infant services and to promote future improvements.



**Project Impact**, which started in 1995, is carried out by the Northeast Florida Healthy Start Coalition with funding from the Florida Department of Health.

Each month, fetal/infant death cases are selected for the project based on specific criteria. Between 2000-2006, more than 180 cases were reviewed through this process. Utilizing an approach developed by the American College of Obstetrics and Gynecology (ACOG), information is abstracted from birth, death, medical, hospital and autopsy records. Efforts are also made to interview the family. No information which identifies the family or medical providers is included on the abstraction form. Case summaries are developed and presented bimonthly to the Case Review Team (CRT).

The CRT, a multidisciplinary group of community medical and social service professionals, examines each case to determine medical, social, financial and other issues that may have impacted on the poor birth outcome.

## New Campaign Targets SIDS, Sleep-Related Deaths

A new awareness and education campaign will be launched in 2007 to address the increasing number of sleep-related deaths in northeast Florida. SIDS and other sleep-related deaths are a leading cause of infant death in the region after the first month of life. In 2000-2005, there were 134 sleep-related deaths in the five county area. These deaths accounted for 14% of all infant deaths and nearly 40% of all deaths between 28 and 364 days.

“Community campaigns such as Back-to-Sleep have resulted in significant decreases in SIDS and other sleep-related deaths,” noted Laurie Lee, coordinator of the region’s Fetal & Infant Mortality Review Project (FIMR). “Education for both families and people who provide services is key.”

The goal of the safe sleep campaign is to increase awareness about proper sleep positioning, dangers of bed sharing, impact of second hand smoke, importance of breastfeeding and appropriate use of infant beds. Strategies will be directed at key audiences including expectant and new parents, health care providers, child care centers, community agencies serving families, and the general public.

The campaign will be implemented through a multi-organizational partnership including the Northeast Florida Healthy Start Coalition, the



### Prevalence of Risk Factors Associated with Sleep-Related Deaths in NE Florida 2000-2005

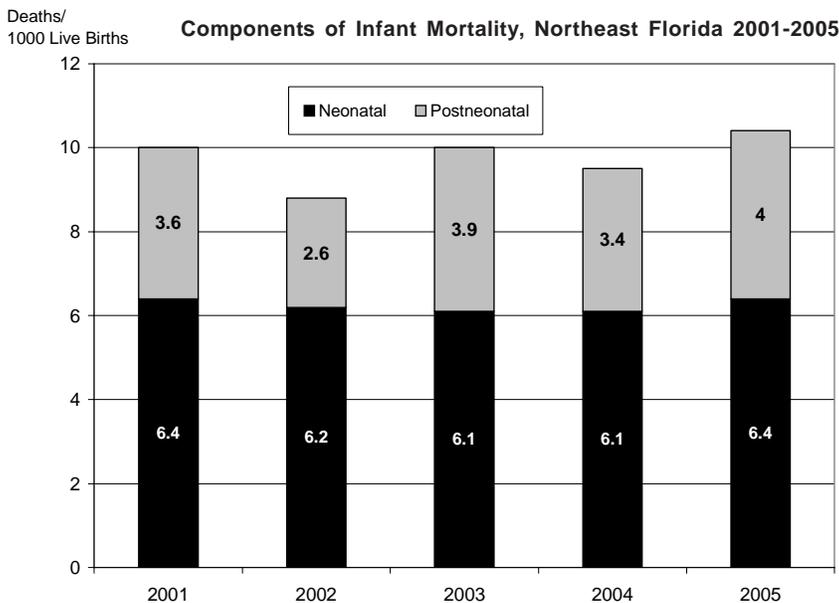
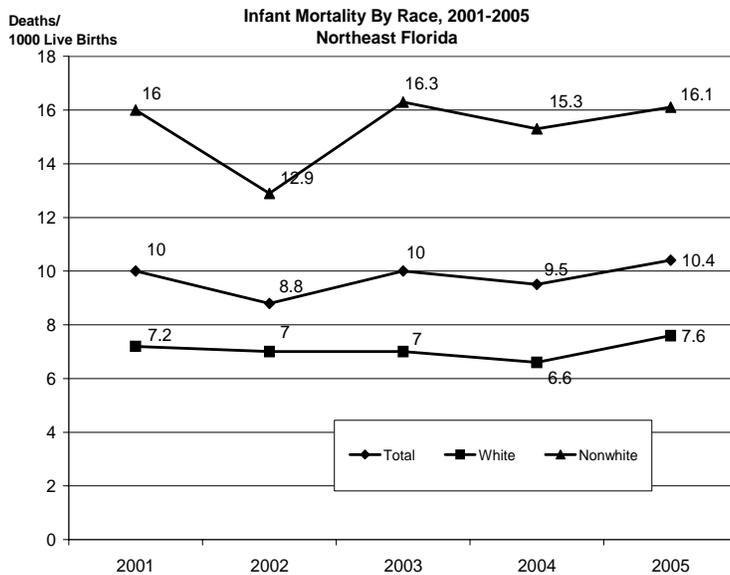
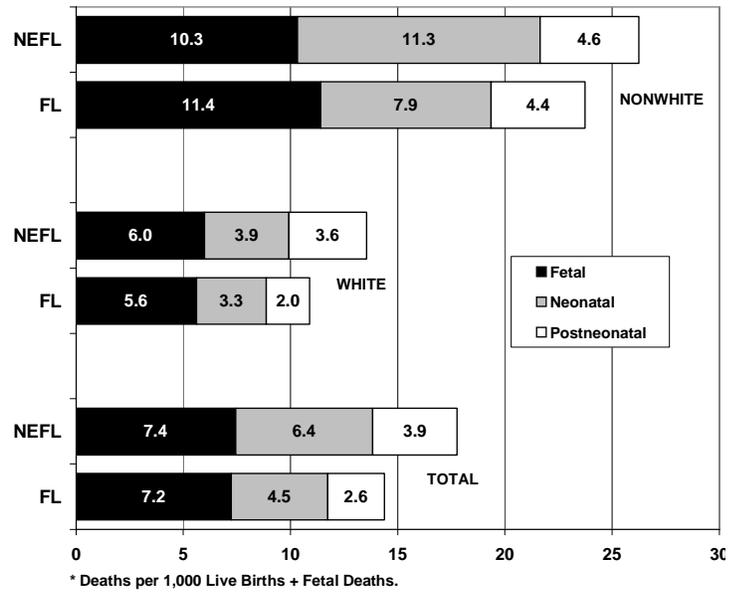
Risk Factor	Percent of Deaths (n=134)
Not in an infant bed	69%
Inappropriate bedding	87%
Not on back to sleep	72%
Second hand smoke	57%
Never breastfed	69%
Bedsharing	59%

Source: Northeast Florida Healthy Start Coalition, FIMR Project, 2000-2005.

Department of Health (health departments), the Department of Children and Families, Jacksonville Children’s Commission, Early Learning Coalitions (Duval and surrounding counties), Flagler Hospital, UF Department of Pediatrics and other groups. Initial funding for the campaign will be provided by the Healthy Start Coalition (\$50,000) with a goal of raising \$50,000 in additional cash and in-kind support.



2005 Fetal-Infant Death Rate  
Northeast Florida & Florida\*



## Infant Losses

In 2005, there was a total of 325 infant losses in Northeast Florida. This includes 136 fetal deaths or stillbirths (42%) and 189 infant deaths (58%).

The five-county area had a fetal-infant mortality rate of 17.8 per 1,000 live births and fetal deaths in 2005, compared to a state rate of 14.4 per 1,000. Fetal-infant mortality rates for both whites and nonwhites in the region exceeded state rates in 2005.

Infant mortality includes deaths to live born babies during their first year of life. In 2005, the five-county area had an infant mortality rate of 10.4 deaths per 1,000 live births. The infant mortality rate for nonwhites (16.1 deaths per 1,000) was more than twice as high as the rate for whites (7.6 deaths per 1,000).

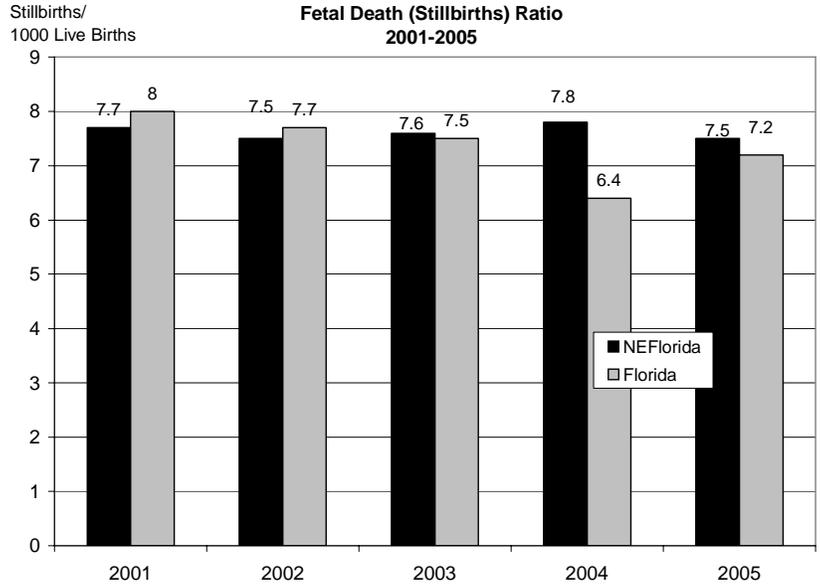
Northeast Florida exceeds state infant mortality rates overall and by race. Florida's infant mortality rate was 7.2 deaths per 1,000 live births in 2005. Statewide, the infant mortality rate for whites was 5.3 per 1,000 live births; for nonwhites it was 12.5 per 1,000.

Infant mortality includes two components: neonatal mortality (deaths to infants less than 28 days old) and postneonatal mortality (deaths to infants between 28 and 364 days old).

# Fetal Mortality

Fetal mortality or stillbirths includes deaths which occur before birth following at least 20 weeks gestation. In 2005, the five-county area had a ratio of 7.5 fetal deaths for every 1,000 live births, comparable to state rates (7.2 deaths per 1,000 live births).

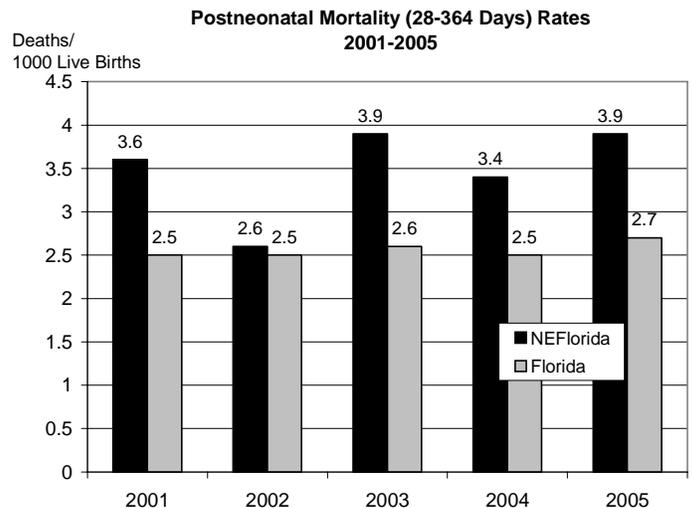
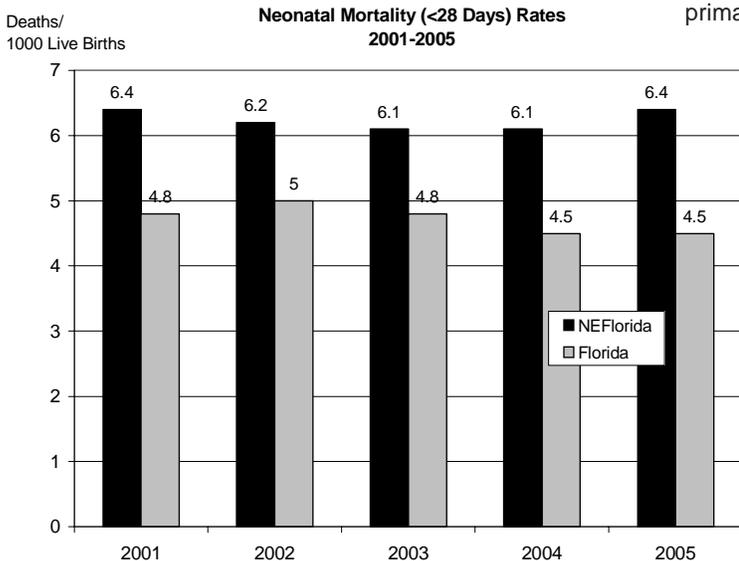
The fetal mortality ratio for whites in the region was 6.0/1,000 live births compared to 5.6/1,000 statewide. For nonwhites it was 10.4/1,000, compared to 11.5/1,000 statewide.



# Neonatal Mortality

Neonatal mortality includes deaths occurring to infants before they are 28 days old. In 2005, the neonatal mortality rate in Northeast Florida was 6.4 deaths per 1,000 live births. The neonatal mortality rate for whites was 4.0 deaths per 1,000; for nonwhites the rate was 11.4 per 1,000. Statewide, the neonatal mortality rate in 2005 was 4.5/1,000 (3.3/1,000 for whites and 8.0/1,000 for nonwhites).

Most of the infants (60+%) who die in the neonatal period die within the first 24 hours of life. Prematurity or low birthweight is the primary cause of neonatal mortality.



# Postneonatal Mortality

Postneonatal mortality includes deaths of infants from 28 days to 364 days of age. In 2005, the five-county area had a postneonatal death rate of 3.9 per 1,000 live births (3.1/1,000 white and 4.8/1,000 nonwhite).

The postneonatal death rate in the region was more than 40 percent higher than state rate of 2.7 per 1,000 live births. Leading causes of postneonatal death in the region are prematurity, congenital anomalies, and sleep-related deaths, including SIDS.

# CDC Focuses on Importance of Preconception Health

The U.S. Centers for Disease Control and Prevention (CDC), in collaboration with more than 35 federal, public and private partners, released national recommendations in 2006 designed to encourage women to take steps toward good health before becoming pregnant.

The recommendations on preconception health and health care identify more than a dozen risk factors and conditions that require interventions before pregnancy to be effective.

"Preconception health is important for every woman capable of having a baby, and should be tailored to each individual," said Dr. José Cordero, director of CDC's National Center on Birth Defects and Developmental Disabilities and Assistant Surgeon General. "And all couples, whether or not they are planning pregnancies, should have a reproductive life plan."

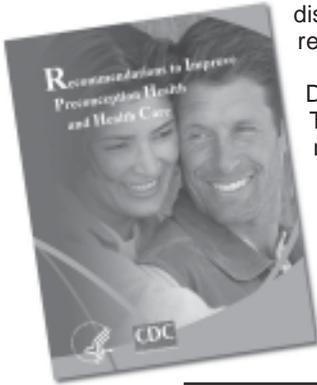
The recommendations also give physicians and other health care professionals the knowledge, messages and tools to act on the scientific evidence that exists about how and when to intervene for preconception care.

The Magnolia Project, the Coalition's federally-funded preconception health initiative to address disparities in birth outcomes, was featured in a USA Today article this spring about the new CDC recommendations.

Marsha Davis, community development coordinator for the Magnolia Project, and Coalition Executive Director Carol Brady are also participating on a CDC-organized work group targeting consumers. The work group will develop strategies to promote consumer awareness and implementation of the new recommendations. Other work groups are addressing health care providers, research and

The recommendations are the result of two-years of collaborative effort with a number of partner groups including The Academy of Obstetricians and Gynecologists, The National March of Dimes Birth Defects Foundation, The Association of Maternal and Child Health programs, The American College of Nurse Midwives, The American Academy of Pediatrics, National Association of County and City Health Officials, Association of State and Territorial Health Officials, and The American Academy of Family Physicians.

The full recommendations on preconception care are available at [www.cdc.gov/mmwr](http://www.cdc.gov/mmwr).



## Pilot Projects Will Test New Approaches for Improving Women's Health

New pilot projects in northeast Florida will test different approaches for improving preconception health during 2007. The Florida Department of Health is providing one-time funding to Healthy Start Coalitions statewide, to implement key CDC recommendations for addressing women's health needs prior to pregnancy.

In northeast Florida, funding will be used to pilot and evaluate two adaptations of Magnolia Project models in St. Johns and Clay Counties, as well as enhance interconception services provided by the Healthy Start programs in Baker, Duval and Nassau Counties. Programs will target high-risk women, particularly those who have experienced a previous poor outcome.



In St. Johns County, Good Samaritan Health Center and the health department will develop and implement an **enhanced preconception care community outreach and education model** focusing on at-risk women of childbearing age, in the West Augustine area. The need for preconception services aimed at Black women was identified by the St. Johns Infant Mortality Task Force in its recent study.

In Clay County, the health department will pilot **preconception care case management services** at a family planning clinic. The pilot will adapt women's health screening tools, the education and counseling program, and risk reduction strategies and pilot their integration into an established service for preconceptional women.

Duval, Nassau and Baker Counties will also receive funding to enhance interconception education and related services offered through the Healthy Start program. Dental care will be provided to at-risk women in Baker County to address preconception risks associated with periodontal infections. Women's health education groups will be organized in Duval County through a collaborative effort between the health department's Healthy Start and WIC programs. In Nassau County, Healthy Start staff will expand risk screening and counseling provided at local doctors' offices to women returning for their postpartum check-up.

### From Data to Action

## Flagler Hospital Receives Funding for SIDS Education

Flagler Hospital received funding from the CJ Foundation for the Prevention of SIDS to organize education and awareness activities for health care and community agency providers in St. Johns County.

The grant was submitted by the hospital in response to findings from the St. Johns Infant Mortality Task Force on the impact of SIDS and other sleep-related deaths on the county's infant mortality rate.

Education programs, including Grand Rounds and training for community agencies, will be implemented by the hospital's Life Institute during 2007.

# St. Johns Task Force Develops Strategies for Improving Infant Health

Strategies to improve birth outcomes in St. Johns County should focus on preconception health—particularly among Black mothers, sleep-related deaths, obesity and tobacco use during pregnancy.

Those are the recommendations of a special community task force that met during 2006 to examine the county's increasing infant mortality rate.

The Northeast Florida Healthy Start Coalition identified St. Johns County as an area of concern in its 2005 Fetal and Infant Mortality Review (FIMR) report. Although the overall infant mortality rate in St. Johns County is under the state rate, deaths have increased over the last five years, particularly among the nonwhite population. Nonwhite infant mortality in 2002-2004 was 18.2 deaths/1000 live births, the highest in the region.

The task force, chaired by Dawn Allicock, MD, MPH, county health department director, reviewed information from birth and death certificates. The group also examined detailed results from 35 fetal and infant death cases that were abstracted by the Coalition using the FIMR process.

There were 53 fetal and infant deaths in St. Johns County during 2002-2004. Forty-one (41) percent of these losses were fetal deaths or stillborn; nearly 40 percent were neonatal deaths (<28 days old) and 19 percent were postneonatal (28-364 days old). Over a five year period, one in five deaths in the county was from SIDS or a sleep-related cause. West Augustine experienced the highest infant death rate during this period.

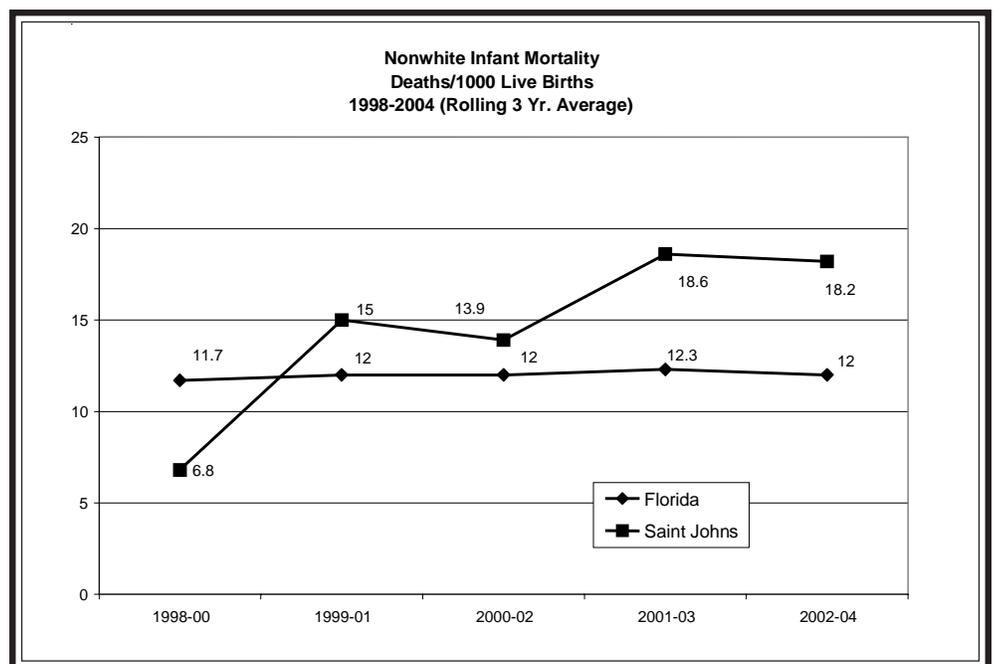
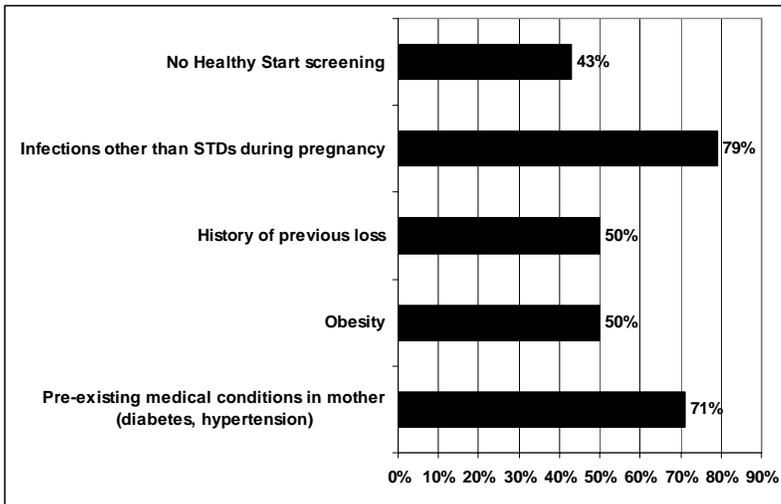
Compared to the state, mothers who gave birth in St. Johns County during 2002-2004 were older, more educated, less likely to be unwed or to have received late or no prenatal care. However, mothers in St. Johns County were more likely to report using tobacco during their pregnancies.

About 7.7 percent of the babies born in St. Johns County were low birthweight (<2500 grams); about 1.4 percent were born weighing less than 1500 grams (very low birthweight). Racial disparities were evident in rates of both low and very low birthweight babies.

Prematurity, congenital anomalies and SIDS were the leading causes of infant death in 2002-2004. Half of the neonatal deaths in St. Johns County occurred during the first 24 hours of life. The infant deaths during this period included four sets of twins (two White, one Asian and one Black).

Task Force participants included representatives from Flagler Hospital, St. Johns County Social & Mental Health Services, WIC, Healthy Start, Healthy Families, churches and other faith-based organizations, Healthy Mothers-Healthy Babies, Good Samaritan Clinic, Full-Service Schools, and other community groups.

## Summary of Key Contributing Death Factors St. Johns County Case Reviews 2002 – 2005 (n=11)



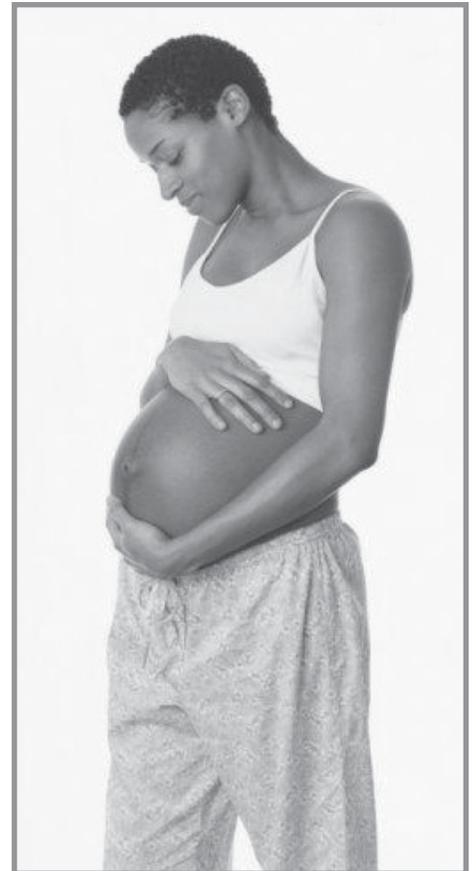
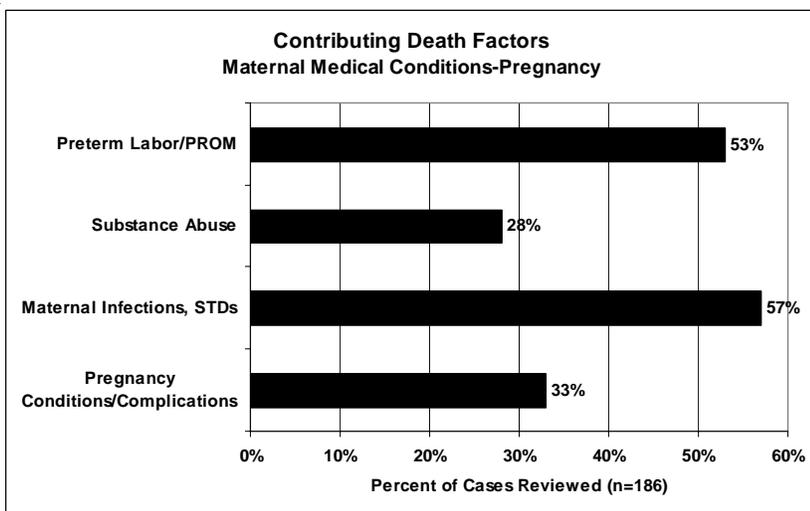
# FIMR Reviews Highlight Impact of Maternal Health on Outcomes

Fetal and infant deaths, reviewed using the FIMR process in 2000-2006, highlight the impact of a mother's health prior to and during pregnancy on poor birth outcomes.

Cases were selected for review during this period based on specific criteria including, type of death (fetal vs. infant), residence (target area vs. other areas) and race (black vs. others). The selection process reflected concern with the disparity in infant health and its contribution to overall fetal and infant mortality in the region.

## Maternal Medical Conditions During Pregnancy

Maternal infections and STDs were identified in 57 percent of the cases reviewed by the FIMR case review team. In more than one fourth of the cases, the mother was involved in substance use, including tobacco, alcohol or drugs. Pregnancy complications, including pre-eclampsia, placental abruption, gestational diabetes, gestational diabetes, and hyperemesis, was cited as a contributing factor in nearly a third of the cases reviewed.



## Provider Issues

Problems were cited in 22 percent of the cases reviews with poor communication by health care providers, lack of appropriate referrals for high-risk women, poor follow-up of medical conditions and delays in initiating Healthy Start services. Appropriate screening (domestic violence, Healthy Start, substance use) was not evident in 27 percent of the cases examined in 2000-06. FIMR began tracking patient fear and dissatisfaction with the health care system in 2005; since then, in about 40 percent of cases (n=29) fear or dissatisfaction with services was noted as a factor in case reviews.

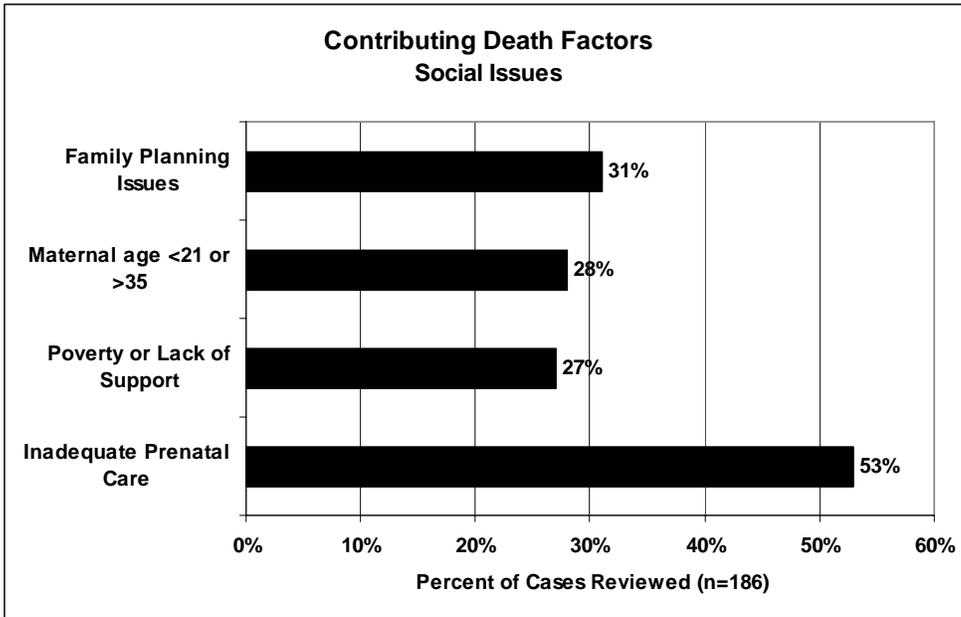


## Parent Education Issues

In nearly one third of the cases reviewed, family planning issues were identified as a contributing factor in the fetal or infant death. This included short interpregnancy intervals and inconsistent use of family planning methods. The mother failed to respond to lack of fetal movement, premature labor and ruptured membranes in about 20 percent of the FIMR cases.

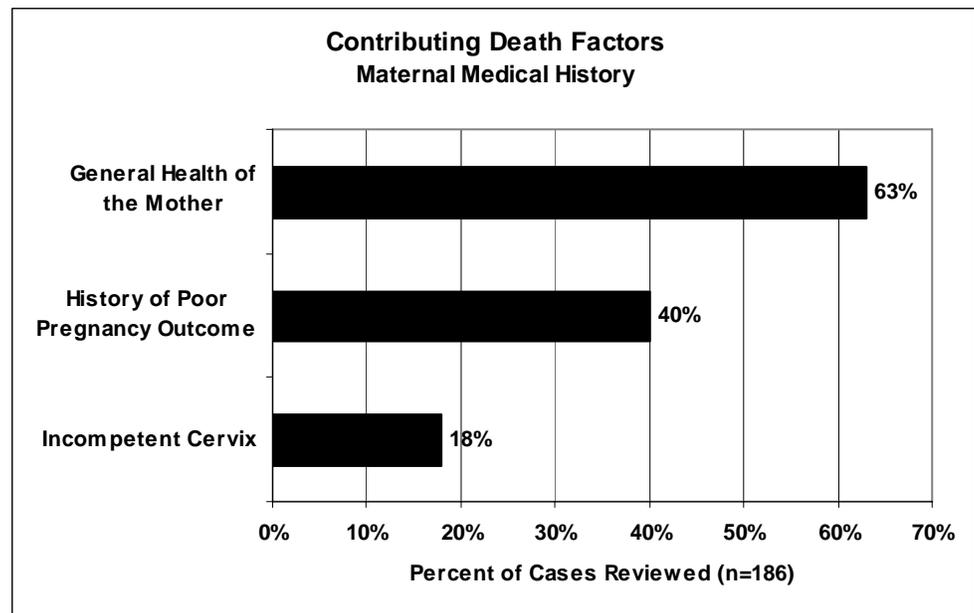
## Social Issues

Late, inconsistent or no prenatal care occurred in more than half of the FIMR cases reviewed in 2000-06. Other frequently cited contributing factors included: poverty and lack of social support (27%) and maternal age <21 or >35 (28%). FIMR reviews began considering life course factors in 2005; more than a third of the cases cited factors that occurred over the woman's lifetime as affecting the poor outcome.



## Maternal Medical History

General health of the mother was the most frequently identified factor in the 186 fetal and infant death cases reviewed in 2000-2006. Included in this category are pre-pregnancy conditions such as diabetes, hypertension and related conditions. This risk was identified in 63 percent of the cases reviewed. Poor nutrition and obesity were the predominant problem areas with this category. In 53 percent of the cases reviewed, the mother had nutritional issues prior to or during her pregnancy.



### Most Frequently Identified Factors FIMR Case Reviews

Contributing Factor	% Cases
General Health of Mother	63%
Maternal Infections & STDs	57%
Late/No Prenatal Care	53%
Preterm Labor/PROM	53%
Previous Poor Outcome	40%
Life Course*	34%
Pregnancy Conditions/Complications	33%
Family Planning Issues	31%
Maternal Age (<21 or >36)	28%
Substance Abuse	28%
No Healthy Start, Other Screening	27%
Social Issues (poverty/lack of support)	27%

Source: January 2000-June 2006 FIMR Case Reviews (n= 186). Multiple factors may be present in individual cases. \*Life course added as a factor in January, 2005 (n= 42 ).

## Fetal/Infant Medical Issues

Pre-existing medical conditions, including congenital anomalies, were cited as a contributing factor in 14 percent of FIMR cases. In 16 percent of the cases, the infant experienced an infection.



# Project **IMPACT** Community Action Recommendations

1. Address the increase in **sleep-related deaths** in NE Florida through the implementation of an awareness and information campaign. Information should include: proper sleep positioning, dangers of bed sharing, impact of second hand smoke, importance of breastfeeding and appropriate use of infant beds. Strategies should be developed to target three groups:
  - a. Expectant and new families - Information should be provided by prenatal care and pediatric providers on safe sleep recommendations. This information should also be provided through Healthy Start, Healthy Families and other case management and support programs.
  - b. Providers - Information about sleep-related mortality should be provided to all health care providers who come into contact with expectant and new families. This communication should emphasize their roles in providing patient education. Suggested educational resources (pamphlets, brochures, etc.) should also be provided for their use and distribution.
  - c. General public - Efforts should be made to identify and distribute appropriate PSAs to area media. Offer presentation at large public baby showers. Utilize Parish Nurse Programs and other faith based community service programs.
  
2. Implement strategies to address **preconception health and planned pregnancies**:
  - a. As above, include the general public, women of child bearing age and providers in educational efforts. Share local FIMR statistics.
  - b. Expand the WIC voucher program to all of the counties in the region. This program, currently operating in St. Johns County, enables participants to purchase fresh fruit and vegetables from local farmers.
  - c. Facilitate WIC enrollment and increase program focus on obesity and other nutritional issues.
  - d. Educate pregnant women and providers on the importance of contraception and baby spacing. Encourage women to return for their postpartum visit.

Florida Vital Statistics, 2005 Florida Department of Health; Project *Impact* Summaries of Case Review Team Deliberations, January 2000- June 2006

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*Graphic design of Project Impact provided by  
the Northeast Florida Regional Council Office of Communication and Intergovernmental Relations*

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Healthy Start and **Project Impact** are funded by the Florida Department of Health