

# project

Fetal & Infant Mortality Review Project

# IMPACT

2012-2013 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. From 2009-2011, nearly 90 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 that 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 the poor birth outcome. A Community Action Team (CAT) works to implement FIMR recommendations.

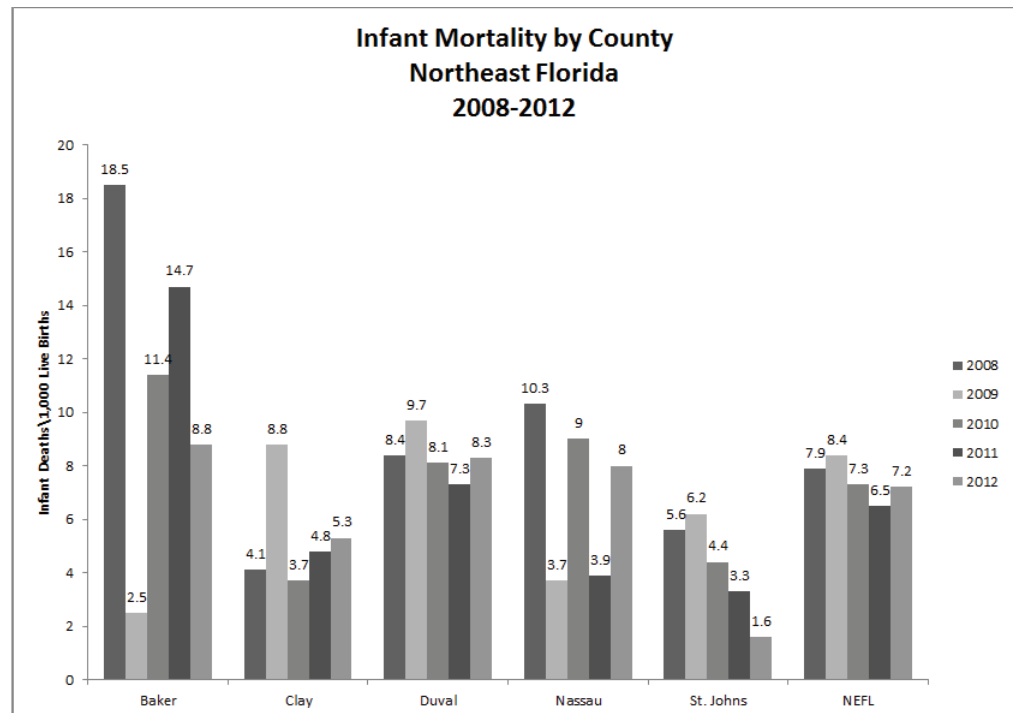


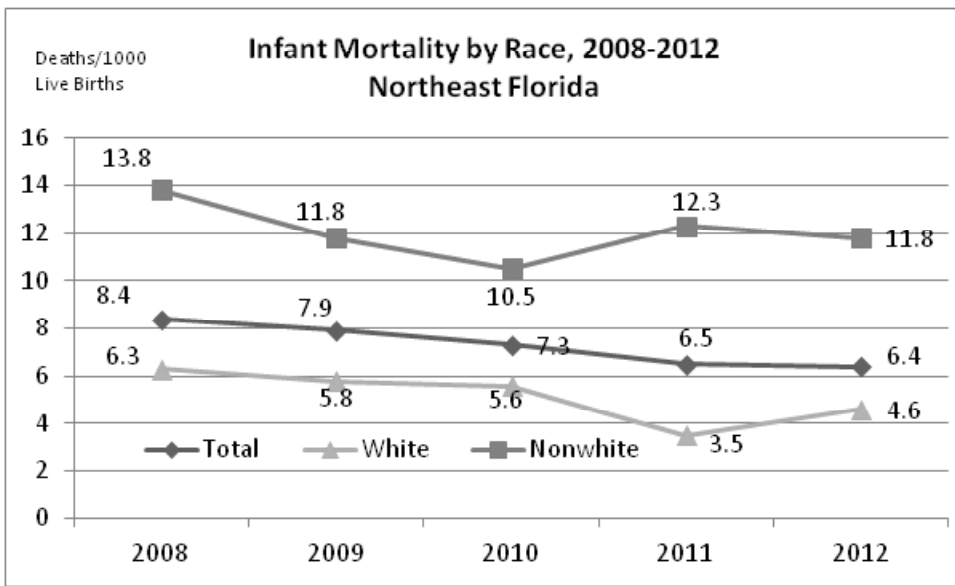
## Infant Mortality rates rise slightly in 2012 due to uptick in white rates

The infant mortality rate in Northeast Florida ticked up slightly in 2012 to 7.2 deaths per 1000 live births. In 2011, the region's infant mortality rate was 6.5 deaths per 1000, it's lowest rate in 20 years.

A 30 percent increase in white infant mortality during the last year contributed to the higher rate. In 2011, white infant mortality in the region was 3.5 deaths per 1000 live births, compared to 4.6 deaths per 1000 in 2012. The 2012 rates are more comparable to previous mortality trends in the region and mirror the state rate for this group.

Infant mortality rates in 2012 range from 8.8 deaths per 1000 in Baker County to 1.6 deaths per 1000 in St. Johns County. Baker and Duval counties continue to have the highest rates in the five-county area.





## INFANT LOSSES

In 2012, there was a total of 248 infant losses in Northeast Florida. This includes 121 fetal deaths or stillbirths (49 percent) and 127 infant deaths (51 percent).

The five-county area had a fetal-infant mortality rate of 14.2 deaths per 1000 live births and fetal deaths in 2012, compared to the state rate of 13.2 per 1000. Fetal-infant mortality rates for white were below the state rate, while rates for nonwhites were higher.

Infant mortality includes deaths to live born babies during their first year of life. In 2012, the five-county area had an infant mortality rate of 7.2 deaths per 1000 live births. The disparity between nonwhite and white deaths decreased but is still significant—the rate for nonwhites (11.8 deaths per 1000) was 2.5 times the rate for whites (4.6 deaths per 1000). In 2011, the nonwhite rate was 3.5 times the white rate.

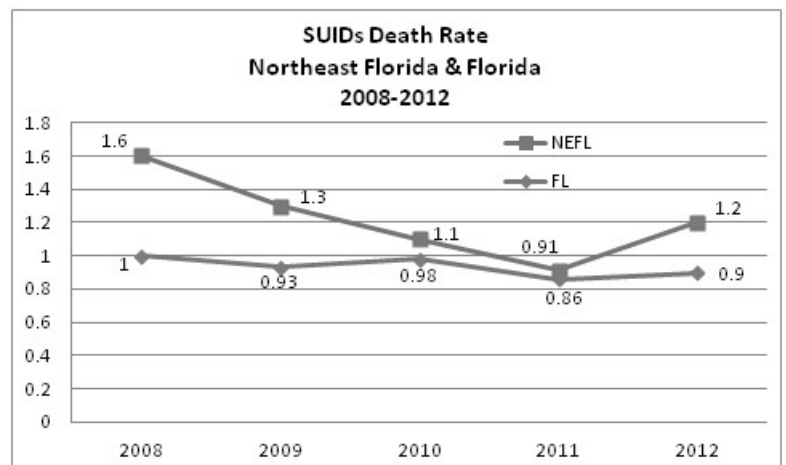
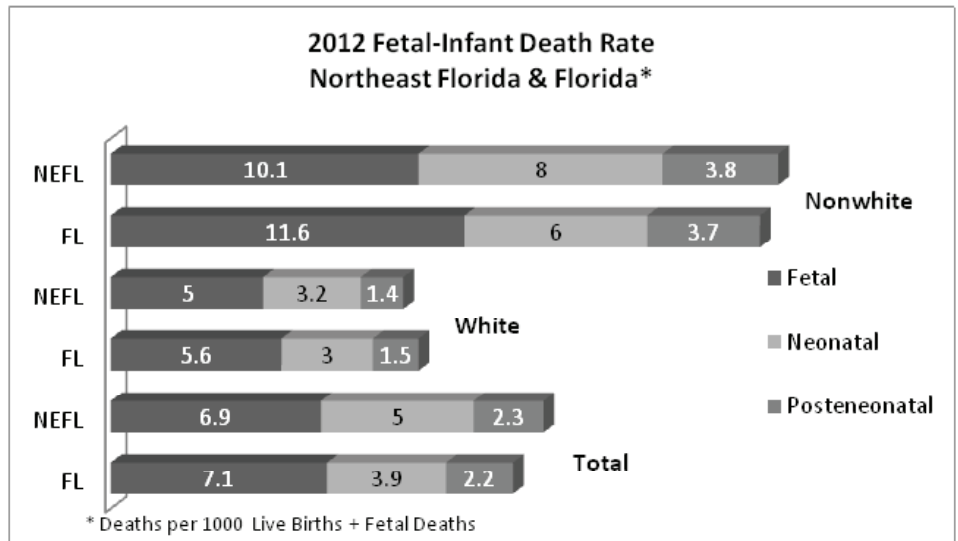
While Northeast Florida had comparable rates in 2011, the region exceeded the state infant mortality rate in 2012 (6.0 deaths per 1000 live births). Statewide, the infant mortality rate for whites was 4.6 per 1000 live births; for nonwhites it was 9.7 per 1000.

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).

## SLEEP-RELATED DEATHS INCREASE

Sudden Unexplained Infant Deaths (SUIDs), including SIDS and other sleep-related deaths, increased slightly in 2012 to 1.2 deaths per 1000 live births. SUIDs account for 16.5 percent of all infant deaths in the region, compared to 15.4 percent in Florida.

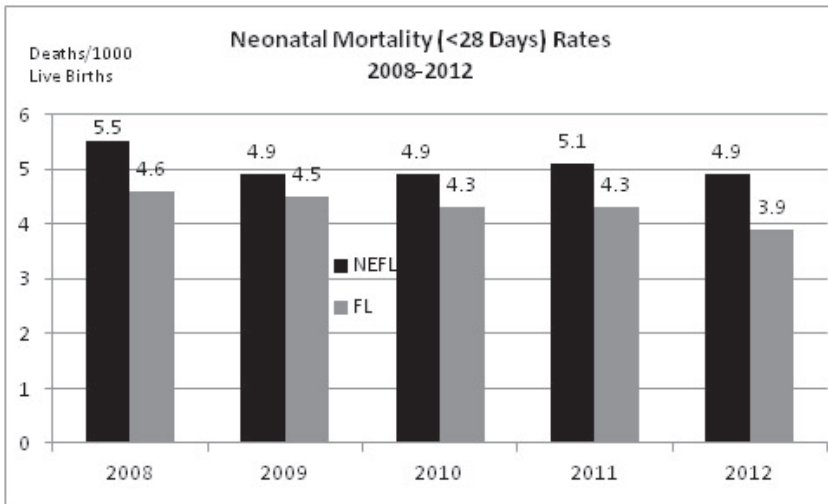
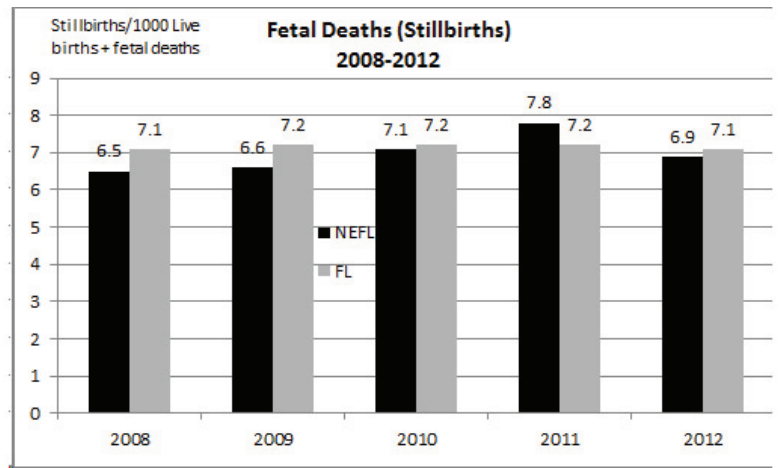
There were 21 SUIDs deaths in Northeast Florida in 2012: three in Clay County, 17 in Duval County and one in St. Johns County. The regional rate increased to 1.2 sleep-related deaths per 1000 live births, compared to .9 deaths per 1,000 live births for the state.



## FETAL MORTALITY

Fetal mortality or stillbirths includes deaths which occur before birth following at least 20 weeks gestation. In 2012, the five-county area had a ratio of 6.9 fetal deaths for every 1000 live births plus fetal deaths, below the state rate (7.1 deaths per 1000 live births) and a decrease from the 2011 regional rate of 7.8 deaths per 1000.

The fetal mortality ratio for whites in the region was 5.0/1,000 live births compared to 5.6/1,000 statewide. For nonwhites it was 10.1/1000 compared to 11.6/1000 statewide.



## NEONATAL MORTALITY

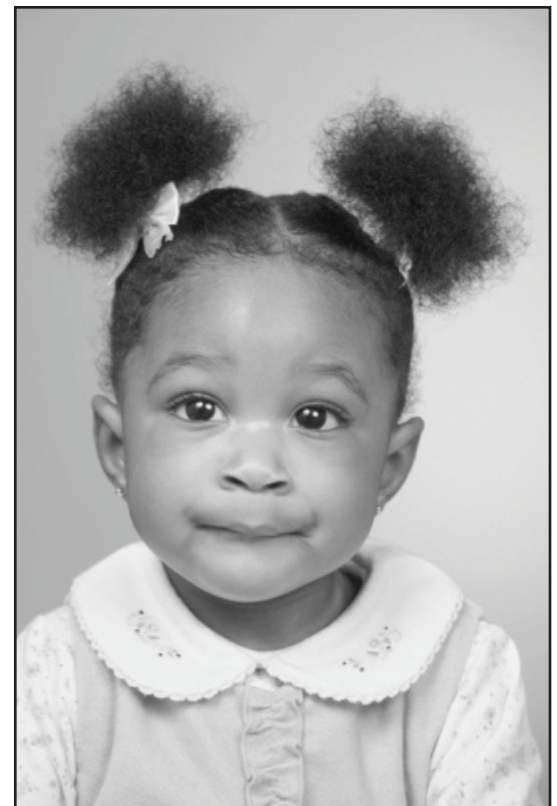
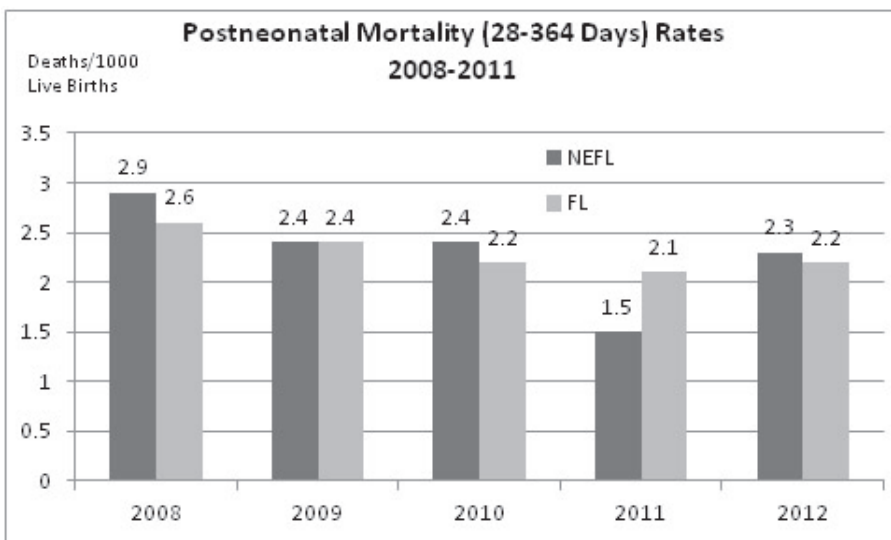
Neonatal mortality includes deaths occurring to infants before they are 28 days old. In 2012, the neonatal mortality rate in Northeast Florida was 4.9 deaths per 1,000 live births, a decrease from 2011 rates, but consistent with 2009 and 2010 rates. The neonatal mortality rate for whites was 4.6 deaths per 1000; for nonwhites, the rate was 3.8 per 1000. Statewide, the neonatal mortality rate in 2011 was 3.9/1000 (3.0/1000 for whites and 6.0/1000 for nonwhites.)

More than 40 percent of infants 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 2012, the five-county area had a postneonatal death rate of 2.3 per 1000 live births (1.5/1000 white and 3.8/1000 nonwhite).

The state postneonatal death rate in 2012 was 2.2 deaths per 1000 live births (1.5/1000 white and 3.7/1000 nonwhite).





## SHOW YOUR LOVE CAMPAIGN PROMOTES HEALTH PRIOR TO PREGNANCY

Show Your Love is a national campaign developed by the U.S. Centers for Disease and Control Prevention. Launching on Valentine's Day, its goal is to help women prepare for healthy pregnancies and babies by adopting healthy habits well before becoming pregnant. By adopting healthy habits, women are showing their love to their future babies and also to themselves.

According to the CDC, preconception health is the health of women and men during their reproductive years. As part of their preconception health, women can take steps now to protect their health and the health of the family they may want to have sometime in the future.

The Coalition participated in this important effort, which reflects our mission to improve the health of children, childbearing women and their families in the region. Checklists for women planning pregnancy and non-planners were distributed into the community, in addition to a social media campaign to promote preconception health messages.

For more information, visit <http://www.cdc.gov/showyourlove>.

## ALLIANCE BRINGS TOGETHER AGENCIES, COLLEGE STUDENTS TO IMPROVE PRECONCEPTION HEALTH

The Jacksonville Infant Mortality Alliance is a collaboration between the Preconception Peer Educator program, community agencies and the Healthy Start Coalition. It was launched in October 2012 after a community training hosted by the Coalition and the federal Office of Minority Health aimed to link college students and local health agencies to improve health prior to pregnancy.

The Alliance has two main objectives: 1. Increase awareness of infant mortality rates. 2. Increase access and quality of preconception health services and institutionalize preconception health in clinical practice for women of childbearing age and sexually active men.

Members work on promoting preconception health messages on campus and in the community, coordinate activities for infant mortality and SIDS awareness months and develop recruitment strategies.



## MAKE A NOISE! MAKE A DIFFERENCE! PROGRAMS CONTINUE

The Make a Noise! Make a Difference! Lay Health Advocate program continues to focus on reducing infant mortality. The health advocate curriculum guide, developed by The Magnolia Project and modeled after the successful Community Voice program, is divided into four sessions: healthy before pregnancy, healthy during pregnancy, healthy two and healthy baby.

Subjects include not only healthy habits, but also topics like stress, the role of fathers, the importance of vaccines and the threat of SIDS. After completing the four sessions with staff, the new “Lay Health Advocates” are provided materials to attract and educate people about black infant mortality.

The fifth Make a Difference! Leadership Academy class graduated September 26, 2013. Eleven community residents were awarded Certificates of Completion. Graduates spoke of their journey through the 12-week course and expressed their appreciation for being involved. Graduates will continue their involvement through becoming Leadership Academy Alumni to advocate for various community concerns.

The Leadership Academy utilizes training material developed by the University of Arizona in 12 weekly sessions and includes additional historical information. The next Leadership Academy will occur early Spring of 2014.



## INFANT MORTALITY TASK FORCES PLAN COUNTY-SPECIFIC EFFORTS

**ST. JOHNS.** The Infant Mortality Task Force is currently in the process of developing a new Action Plan for 2013-14. Target areas have been assessed and will include: healthy weight, early prenatal care, safe sleep, substance abuse and breastfeeding. A comprehensive data review of birth outcomes and infant mortality was completed to determine the most current statistics for each target area. The next step will be developing activities to address these areas.

**BAKER.** The Infant Mortality Task Force reviewed the 2013-14 Action Plan and discussed the priority areas that include teen pregnancy, safe sleep/SIDS, family planning, breastfeeding, grief counseling and father involvement. In July 2012, fatherhood classes began at the Baker County Jail using the InsideOut Dad curriculum, an evidence-based program for incarcerated fathers. A new parent support group for women in the Baker County Jail was added in the Fall 2012. The Task Force hosted a safe sleep lunch and learn for OBs, pediatricians and other interested participants at the Florida Department of Health in Baker County in November 2012.

**NASSAU.** A Nassau County Infant Mortality Task Force was created as part of an extensive public health planning process in the county. Since the first meeting in July 2012, the Task Force has been looking at birth and death records to identify common trends and determine priorities.

## 39 WEEKS CAMPAIGN SEEKS TO REDUCE EARLY ELECTIVE DELIVERIES

Hospitals throughout the state and region have joined in efforts to curb non-medically indicated deliveries before 39 weeks gestation. Early elective deliveries have increased significantly in the past 10 years and are associated with increased NICU admissions, breathing and feeding problems, increased risk of infection and increased rates of C-sections and late preterm births.

The Florida Association of Healthy Start Coalitions (FAHSC), under the leadership of the Northeast Florida Healthy Start Coalition, implemented a statewide consumer education campaign in partnership with the March of Dimes. The campaign, called “Healthy Babies are Worth the Wait,” highlights the importance of the last weeks of pregnancy.

Over the last year, the consumer education project focused on 1) the implementation of focus groups around the state targeting Hispanics and men of childbearing age; 2) develop additional educational material targeting Hispanics and men of childbearing age using themes identified through the focus groups that will complement materials developed by the March of Dimes; 3) promotion of the “Healthy Babies are Worth the Wait!” message through the Florida campaign website ([www.39weeksfl.org](http://www.39weeksfl.org)) and social media; 4) collaboration with the USF Chiles Center’s 39 week provider education campaign and Florida Perinatal Quality Collaborative; 5) creation of a statewide training network to provide continuing education around the risks of non-medically indicated early elective deliveries; and, 6) revision of the state Healthy Start Standards and Guidelines.

## MATERNAL HEALTH REMAINS KEY FACTOR

The mother's health prior to and during pregnancy was the most frequent contributing factor identified in the 81 fetal and infant death cases reviewed over the last three years. In addition to cumulative results, several factors were identified with increasing frequency during this period, including: stressors during pregnancy, poverty, STDs during pregnancy, late entry into prenatal care, unplanned pregnancy and substance abuse.



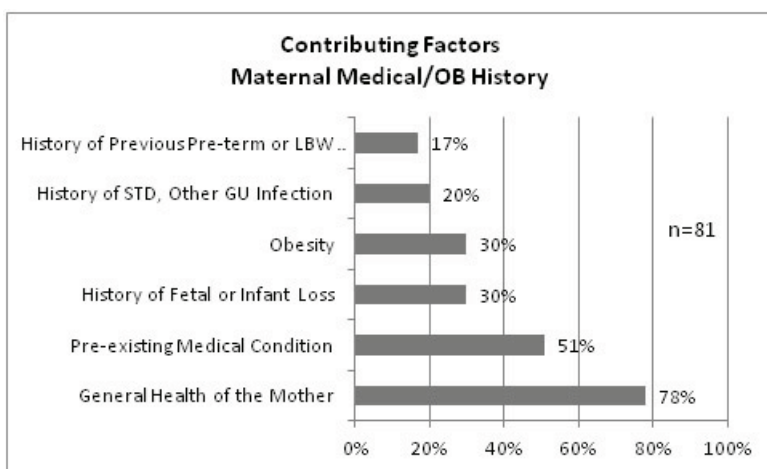
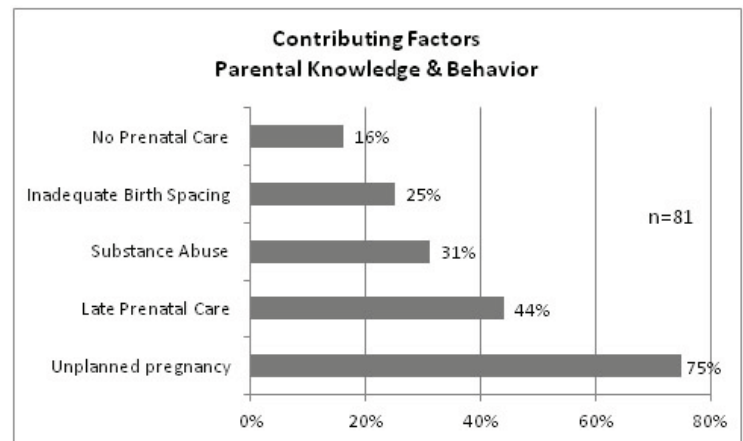
## KNOWLEDGE & BEHAVIOR

Family planning issues were identified in more than 80 percent of the cases examined by the FIMR case review team in 2010-2012. Three-quarters of the FIMR cases were unplanned pregnancies and inadequate birth spacing was found in one-quarter of cases. Substance use, including alcohol, tobacco and drugs, was present in 31 percent of the cases. Late entry into prenatal care was cited in 44 percent of the cases while 16 percent of mothers received no prenatal care prior to delivery.

Most Frequently Identified Factors  
FIMR Case Reviews

Contributing Factor	% of Cases
Family Planning Issues	83%
General Health, Medical History of Mom	78%
Late or No Prenatal Care	60%
Maternal Infections other than STDs	56%
Preterm Labor	48%
Prematurity	48%
Fetal, Infant Infection	42%
Life Course Issues	41%
Poverty	41%
Substance Abuse	31%
Obesity	30%
History of Fetal, Infant Loss	30%

Source: January 2010-December 2012 FIMR Case Reviews. N=81. Multiple factors may be present in individual cases



## MATERNAL MEDICAL HISTORY

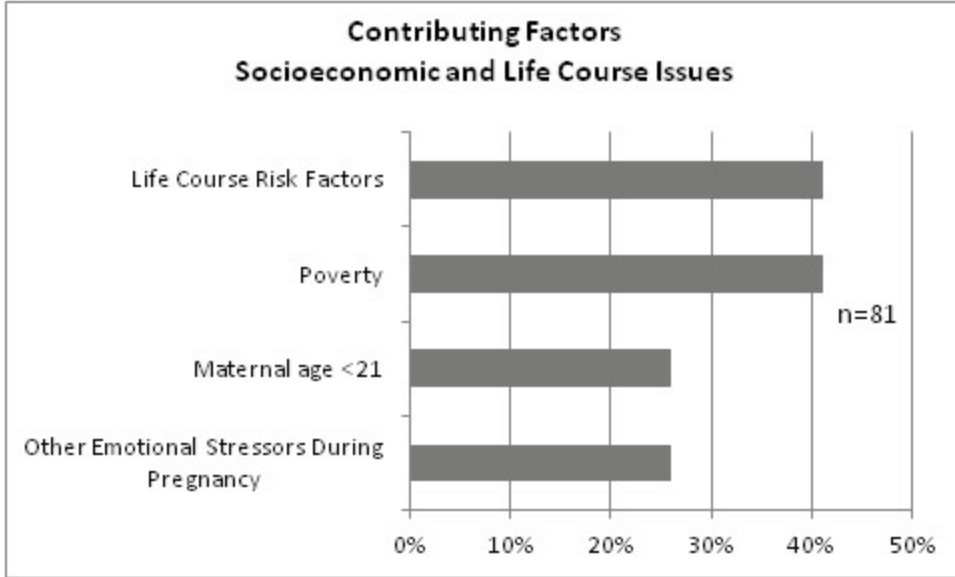
General health of the mother was identified as a contributing factor in 78 percent of the cases reviewed in 2010-2012. Pre-pregnancy conditions such as diabetes, hypertension, poor nutrition, obesity and related conditions were identified in more than half (51 percent) of the cases reviewed. A history of a previous poor outcome was present in 30 percent of the cases. Obesity was identified as a contributing factor in another 30 percent of the cases reviewed; while inadequate nutrition, including first trimester anemia, was cited in one-fifth of the fetal and infant death cases examined. In 20 percent of the FIMR cases, a history of sexually transmitted or other infections was present.

## MATERNAL MEDICAL CONDITIONS DURING PREGNANCY

Maternal medical conditions during pregnancy were cited in 91 percent of the cases examined during 2010-2012. Included are: maternal infections other than STDs (56%) and preterm labor (48%). In more than 25 percent of FIMR cases, there was premature rupture of the membranes (PROM) or placental abruption. Anemia was diagnosed after the first trimester in 27 percent of the cases reviewed. The percentage of FIMR cases with a STD is nearly one third (30%)

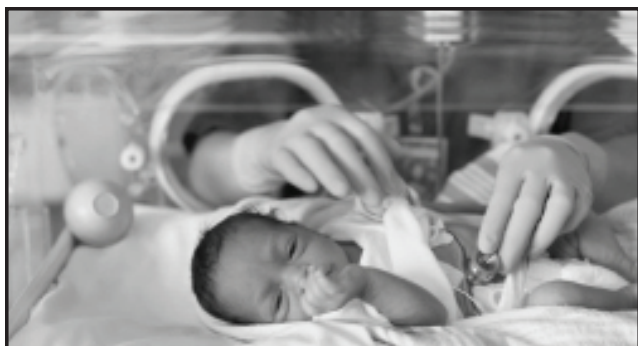
# SOCIOECONOMIC & LIFE COURSE ISSUES

In four out of ten cases reviewed, the mother experienced life course stressors. These include a history of abuse, poverty, lack of support during her childhood or early life. In 41% of the cases reviewed, the mother lived in poverty during her pregnancy. In more than a quarter of cases, maternal age was a factor (< 21 years old). Other emotional stressors were experienced during pregnancy, such as loss of job, incarceration, divorce, etc., in 26 percent of cases.



## PROVIDER & SERVICE ISSUES

Screening for Healthy Start was not evident in more than a quarter of the cases examined in 2010-2012. Service issues were identified in 20 percent of the cases reviewed over the last three years; patients voiced fear of or dissatisfaction with services in 15 percent of cases examined.



## FETAL/INFANT MEDICAL ISSUES

Fetal and infant medical issues were prevalent in 69 percent of cases reviewed. Prematurity was a contributing factor in nearly half of all cases. In 42 percent of the cases, the infant experienced an infection.

## DISPARITIES IN CONTRIBUTING FACTORS

Black mothers who have experienced a fetal or infant loss are more likely than their white counterparts to have life course issues like poverty, childhood trauma and other emotional stressors based on FIMR case reviews. There is also a marked disparity in the frequency of contributing factors by race.

# Project **IMPACT** Community Action Recommendations

1. Continue to focus on preventing sleep related deaths. Of the 127 infant deaths in Northeast Florida in 2012, 21 were sleep related. This represents 17% of all deaths as opposed to 13% in 2011. Focus on safe sleep surface and bed sharing. Revive the Cribs4Kids programs in the Northeast Florida region and take advantage of cash-matching programs. We are hopeful that the new Florida Law effective July 1, 2013, requiring all new parents to watch a safe sleep video before taking their baby home, will have an positive impact as well.
2. Focus on safe sex, STD prevention and family planning. Duval County ranks 5th in the state based on 2012 data in STD rates. STD protection education should be separate from family planning as the contraceptive methods that are most effective do not protect against STD's; Decisions should be made about each one individually. Within the FIMR cases, STDs during pregnancy increased from 9% in 2009 to 35% in 2011. It was at 23% in 2012. Eighty-three percent of the FIMR cases had family planning issues. Seventy-five percent were unplanned pregnancies and 25% involved pregnancy intervals less than 12 months. Provide early contraceptive education in the immediate post-partum period about choices, options and birth spacing.
3. Continue to focus on dangers of smoking during pregnancy. Over the last 3 years, the percentage of moms in the death cohort that self-reported some type of substance abuse has gone from 17% in 2010, to 11% in 2011 to 12% in 2012; 90% were tobacco smokers. Last year the Community Action Team began an anti-smoking campaign in the target area (Health Zone 1) last year that is now ready to move into phase 2. It will focus on social media and expand to include the 32218 and 32244 zip codes. The Healthy Start program in St. Johns County piloted SCRIPT (evidence-based smoking cessation program for pregnant women) based on last year's recommendations. The pilot went well and is now expanding into all five counties in the region.

CHARTS, Florida Vital Statistics, 2012 Florida Department of Health; Project *Impact* Summaries of Case Review Team Deliberations, January 2010-December 2012.

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Thank you to Dr. Kathryn Huddleston for 16 years of service as Medical Director  
of the Fetal & Infant Mortality Review Case Review Team!

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