PROJECT IMPACT

FETAL & INFANT MORTALITY REVIEW PROJECT
2013-2014 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 2011-2013, 81 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.

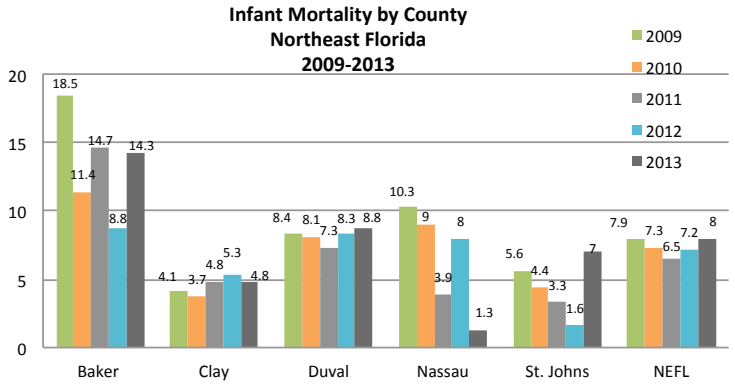
INFANT MORTALITY RATES CONTINUE TO RISE IN 2013, BLACK RATES DECLINE WHILE WHITE RATES INCREASE

The infant mortality rate in Northeast Florida increased for the second year in a row due to increases in white infant mortality and sleep-related deaths.

The regional infant mortality rate – the death of a baby before his or her first birthday – increased from 7.2 deaths per 1000 live births to 8 deaths. The regional rate remains higher than the state rate of 6.1 deaths per 1000 live births in 2013.

Baker County had the highest infant mortality rate in the region at 14.3 deaths per 1000 live births. Nassau County had the lowest at 1.3 deaths per 1000 live births. Rates in counties with small populations like Baker and Nassau fluctuate significantly from year to year, as a few additional or less deaths impact the rate much more than counties with larger populations.

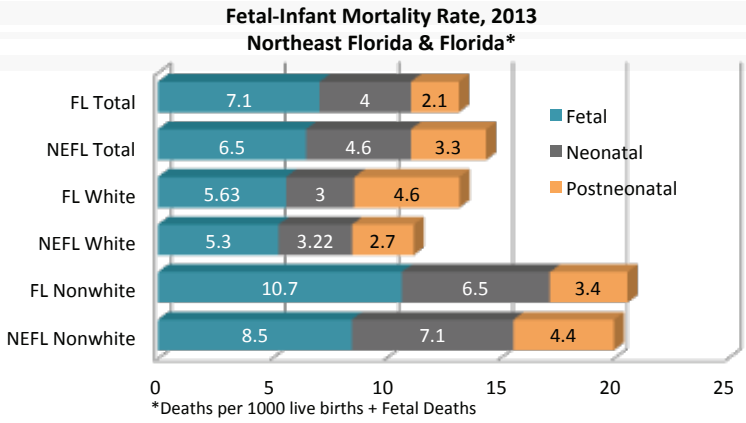
St. Johns County, which historically has had a much lower rate than the region, state and surrounding counties, saw a large increase -- from a rate of 1.6 deaths in 2012 to 7 deaths per 1000 live births in 2013.



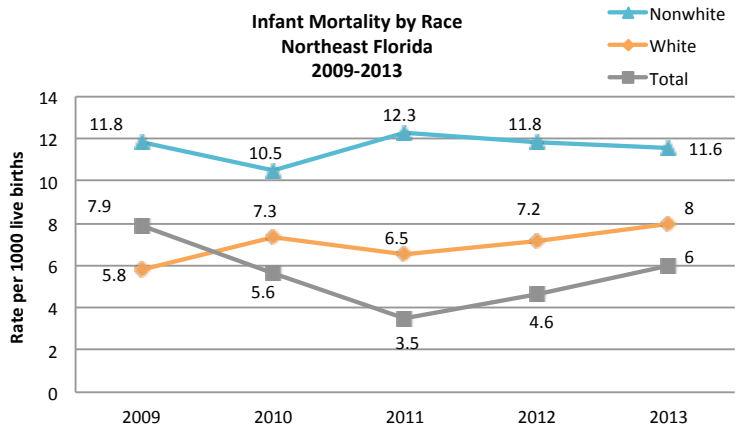
The Northeast Florida black and other nonwhite infant death rate, which typically is more than twice the white rate, decreased from 11.8 deaths per 1000 live births to 11.6 deaths. The white rate increased from 4.6 to 6 deaths per 1000 live births. While the racial gap is closing, more work needs to be done to close it further and bring the overall infant death rate down.

INFANT & FETAL LOSSES

In 2013, there was a total of 256 losses in Northeast Florida. This includes 115 fetal deaths or stillbirths (45 percent) and 141 infant deaths (55 percent).



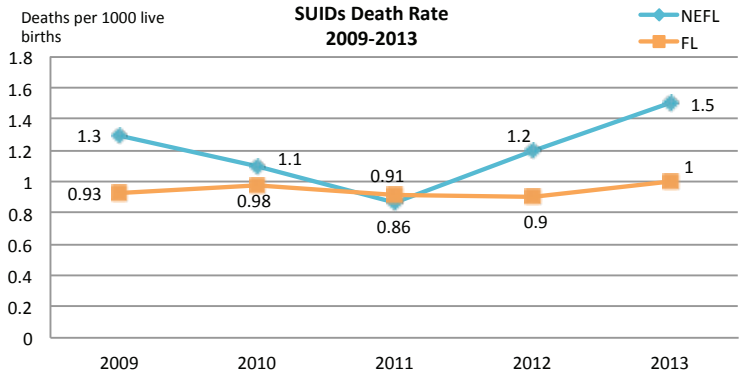
Infant mortality includes deaths to live born babies during their first year of life. It includes two components: neonatal mortality (deaths to infants less than 28 days old) and postneonatal mortality (deaths to infants between 28 and 364 days old). Fetal deaths or stillbirths are deaths before birth, following 20 weeks gestation.



The five-county area had a fetal-infant mortality rate of 14.4 deaths per 1000 live births and fetal deaths in 2013. The regional rate exceeds the state rate, which is 13.2 deaths per 1000 live births and fetal deaths. Black and other nonwhite babies were nearly twice as likely to die of infant or fetal mortality as white babies in both the region and state. Regional white fetal-infant mortality rates were slightly above the state rate, while the black fetal-infant rate was slightly below the state.

SLEEP-RELATED DEATHS

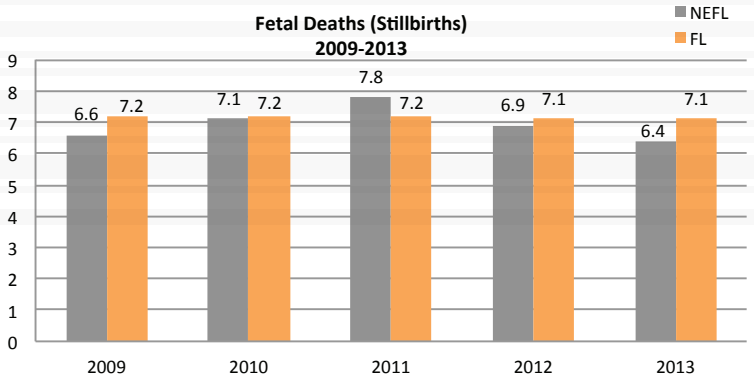
Sleep-related deaths, which had been declining after several years of a nationwide education campaign, are on the rise again. Twenty-six babies died in Northeast Florida in 2013 from Sudden Infant Death Syndrome (SIDS) and suffocation and strangulation both in the bed and in other locations. Sudden Unexplained Infant Deaths (SUIDs), which include SIDS, accounted for 18.4 percent of infant deaths in 2013, compared to 16.3 percent statewide.



FETAL MORTALITY

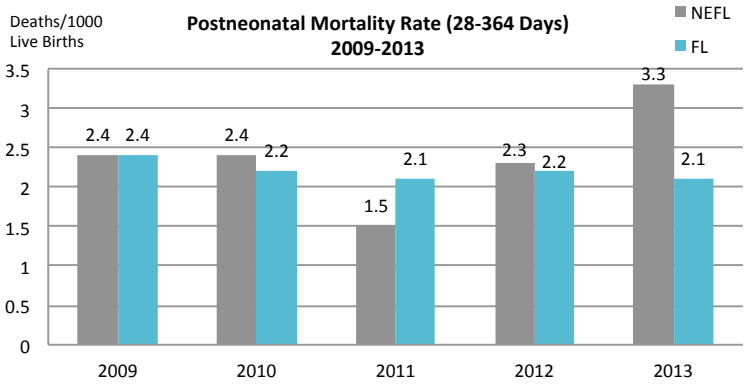
Fetal mortality or stillbirths include deaths which occur before birth following at least 20 weeks gestation. In 2013, the five-county area had a ratio of 6.4 fetal deaths for every 1000 live births plus fetal deaths, below the state rate (7.1 deaths per 1000 live births plus fetal deaths).

The fetal mortality ratio for whites in the region was 5.3 deaths per 1000 live births plus fetal deaths, compared to 5.6 deaths statewide. For nonwhites, the rate was 8.5 deaths per 1000 live births plus fetal deaths, compared to 10.7 deaths statewide.



POSTNEONATAL MORTALITY

Postneonatal Mortality includes deaths of infants from 28 days to 364 days of age. In 2013, the five-county area had a postneonatal death rate of 3.3 deaths per 1000 live births, a significant rise from previous years. (2.7 deaths per 1000 live births for whites and 4.5 deaths per 1000 live births for nonwhites). The regional rate exceeds the state rate of 2.1 deaths per 1000 live births (1.6 deaths per 1000 live births for whites and 3.4 deaths per 1000 live births for nonwhites).

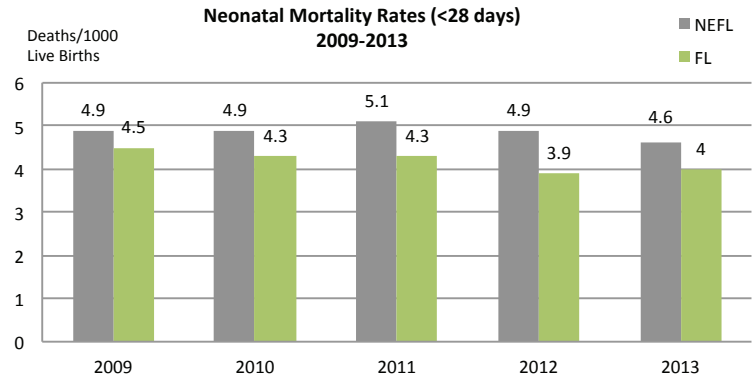


The leading causes of postneonatal deaths in 2013 were SIDS (29 percent) and congenital malformations, deformations and chromosomal abnormalities (22 percent). An additional seven infants died of sleep-related unintentional injuries, including suffocation and strangulation and suffocation and strangulation in bed. All sleep-related deaths (unintentional injuries and SIDS) accounted for 40 percent of postneonatal infant deaths.

NEONATAL MORTALITY

Neonatal mortality includes deaths occurring to infants before they are 28 days old. In 2013, the neonatal mortality rate was 4.6 deaths per 1000 live births in Northeast Florida, continuing a two-year decreasing trend in rates. The neonatal mortality rate for whites was 3.2 deaths per 1000; for nonwhites, the rate was 7.1 per 1000. Statewide the neonatal mortality rate was 4.0 deaths per 1000 live births (3.0 deaths per 1000 live births for whites and 6.5 deaths per 1000 live births for nonwhites).

In 2013, nearly 60 percent of infants who died in the neonatal period died within the first 24 hours of life. Conditions related to premature birth and low birthweight were the primary cause of neonatal mortality.



MAGNOLIA LAUNCHES PRECONCEPTION HEALTH TOOLKIT AND PRIMARY CARE INITIATIVES, AND LIFE COURSE GROUP MODEL

The Magnolia Project, the Coalition's federal Healthy Start program, launched several new initiatives in 2014 to better meet the needs of clients based on their life course and to address gaps in services in the community:

- **Life Course Approach:** The Project began providing life course education through weekly group activities. Group education focused on topics related to the three Life Plan domains:
  - Access to preventive health care and related risk reduction services that improve a woman's chances for a healthy birth in the future. This includes basic reproductive health services, such as GYN care and family planning, as well as care for chronic diseases like diabetes, hypertension and obesity.
  - Family and Community support including activities that provide at-risk women with the skills to develop healthy relationships and connectedness with communities through civic engagement and participation.
  - Reduction of poverty and social inequities that assist participants in completing their education, gaining job skills, confronting discrimination and racism, and developing financial literacy.

  Participants are encouraged to take part in group education activities based on the goals they have set in their Life Plans.
- **Primary Care:** The Magnolia Project will offer primary care services one day a week at the clinic as a pilot. Magnolia participants that utilize clinical services will have the opportunity to receive primary care at the clinic to help them manage other health conditions such as hypertension and diabetes.
- **Preconception Health:** Within the Magnolia Project clinic, the primary care and reproductive health ARNPs will implement the Preconception Care Clinical toolkit, a series of evidence-based recommendations for delivery of preventive care and reproductive health services. The goal of the toolkit is to help clinicians reach every woman who might someday become pregnant every time she presents for routine primary care with efficient, evidence-based strategies and resources. Magnolia will also create a model intervention using material from the toolkit and the Show Your Love campaign for use by home visitors/case managers in promoting and supporting reproductive health planning by at-risk women of childbearing age.
- **Postpartum Depression:** To address postpartum depression, Magnolia is offering the Mother and Babies Course (MB): Preventing Postpartum Depression, an evidence-based group and home visitation intervention for use with at-risk pre- and inter-conceptional women served by the Magnolia Project. It provides these women with a course aimed at preventing the onset of major depressive episodes, allowing them to practice ways to free their mind and connect with others.

FOR MORE INFORMATION:
http://nefhealthystart.org/for-women/magnolia-project/

2013 - 14 HIGHLIGHTS

PREVENTING FETAL & INFANT DEATHS IN NORTHEAST FLORIDA

- The Community Action Team held an anti-smoking video contest as part of the second phase of their "Don't Blow Smoke" campaign, which was developed from the FIMR recommendations. Teens submitted their entries and a winner was selected in March 2014.
- More than 400 fathers participated in evidence-based fatherhood curricula to help them engage with their children as part of the Department of Revenue's BREACH program. The Magnolia Project also began a male component as part of their services.
- The "What's your role?" National Infant Mortality Awareness Month campaign highlighted the importance of everyone in the community in preventing infant mortality and explored the role of many participants, partners, Board and Coalition members and more during September 2014.
- A special FIMR project was launched in St. Johns County to look at the dramatic increase in infant and fetal deaths in the county.
- The North Florida Health Corps AmeriCorps program placed five members at local Healthy Start programs during the 2013-14 service term to address gaps in services and expand the capacity of agencies to serve the community's maternal and child health needs.
- The 39 Weeks Florida "Healthy Babies are Worth the Wait" campaign highlighted the importance of waiting until 39 weeks of pregnancy to deliver during National Prematurity Awareness Month in November 2013.
- The Karen Y. Smithson Memorial Fund – Cribs for Kids was created in memory of a former Coalition employee in September 2014. Donations to Healthy Mothers, Healthy Babies Coalition of North Florida will go to buy cribs for babies without a safe sleep surface in Health Zone 1.

FOR MORE INFORMATION:
http://nefhealthystart.org/blog/

NURSE FAMILY PARTNERSHIP GRADUATES FIRST CLASS


NFP Participant Denise Mills and her two-year old son Calvin.

Thirty-seven healthy, happy two-year-olds donned caps and gowns and walked down the aisle with their families in August, 2014, marking a milestone in Northeast Florida. The children and their mothers were the first graduates of the Healthy Start Coalition's Nurse Family Partnership, an evidence-based home-visiting program that helps ensure first-time mothers have the education and resources to have a healthy baby.

The graduates were the original enrollees in the Nurse Family Partnership program, which launched in 2012 as part of the Florida Maternal, Infant, Early Childhood Home Visiting (MIECHV) program. The program, which is integrated into the local Healthy Start program, provides intensive case management and home visiting by a nurse from pregnancy until the baby is two.

The Nurse Family Partnership is an evidence-based home-visiting model for pregnant women in Duval County. Services are provided to 100 high-risk, first-time mothers in the New Town Success Zone and two other neighborhoods annually by specially-trained nurses from the Florida Department of Health Duval County and UF Health Jacksonville. The Northeast Florida Healthy Start Coalition administers the program.

The model has been identified as successfully impacting key outcomes in maternal and child health, child maltreatment, child development, school readiness, family socio-economic status and injuries, crime and domestic violence. A long-term study recently published in the JAMA Pediatrics journal showed participants in the program are less likely to experience child and maternal mortality.

FOR MORE INFORMATION:
http://http://nefhealthystart.org/for-babies/nurse-family-partnership/

FIRST ANNUAL JACKSONVILLE BABY BUGGY WALK IN THE PARK HELD DURING INFANT MORTALITY AWARENESS MONTH

Michelle Clark and volunteer Erin Caddell walk to raise awareness of Infant Mortality Awareness Month.

Jacksonville joined a dozen other cities across the country this year as a host of Baby Buggy Walk in the Park, a nationwide event aimed at bringing awareness to infant mortality and persistent disparities and encouraging healthy, family fun.

The event was held September 13 at the Magnolia Project, the Coalition's federal Healthy Start project in the Jacksonville urban core aimed at improving the health of women prior to pregnancy. The event emphasizes the important role of parents and the community as a whole in preventing infant deaths and promoting healthy birth outcomes, particularly in minority communities.

Event-goers participated in a health festival and 2.2 mile fitness walk. The free family event provided an opportunity for families to come together for exercise and fun activities, receive valuable health information and screenings and enjoy a fun day in the park.

Moms and dads were pushing babies in their buggies and community members walked in honor of babies that died and to celebrate the babies that made it to their first birthday. After the walk, attendees had an opportunity to speak with various vendors whose focus was on healthy lifestyle. Children who attended were able to listen to a story from a local storyteller from the public library, get their face painted and play arts/crafts. To wrap up the day, participants had the opportunity to participate in a Zumba demonstration.

The Baby Buggy Walk is a unique event that was developed in 2012 by Baltimore Healthy Start, Inc. with a goal of empowering women of the reproductive age and mothers to take care of their health and the health of their children through education with a theme of fitness, fun and family.

FOR MORE INFORMATION:
http://nefhealthystart.org/jacksonvillebabybuggywalk/

MATERNAL HEALTH A KEY FACTOR

A mother's health prior to and during pregnancy was the most frequently identified contributing factor in the 81 fetal and infant death cases reviewed over the last three years by the FIMR Case Review Team. A mother's medical history was a contributing factor in 79 percent of cases, while medical conditions during pregnancy like STDs, maternal infections and placental abruption were present in 93 percent of all cases from 2011-2013. STDs had been on the rise in FIMR cases but have trended downward for the later two years of cases reviewed (2012 and 2013).

Most frequently identified factors

CONTRIBUTING FACTOR	% OF CASES
General Health, Medical History of Mother	79%
Family Planning	75%
Inadequate Prenatal Care	70%
Preterm Labor	48%
Prematurity	46%
Maternal Infections other than STDs	44%
Fetal/Infant Infection	40%
Obesity	37%
Life Course issues	35%
Poverty	32%
Substance Abuse	32%

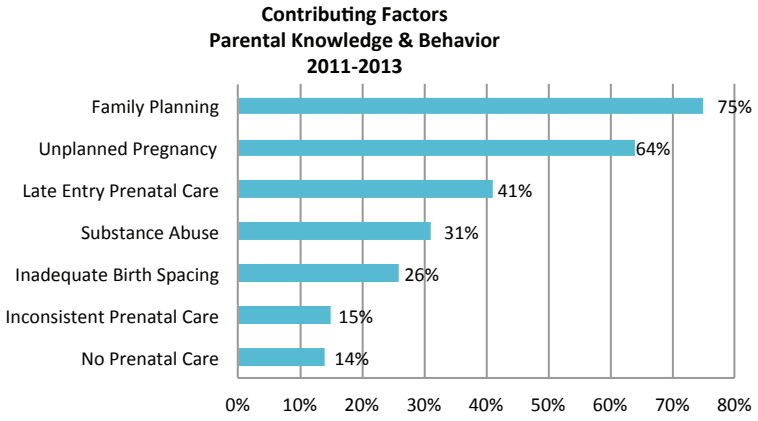
Source: January 2011-December 2013 FIMR Case Reviews. N=81.
Multiple factors may be present in individual cases.

KNOWLEDGE & BEHAVIOR

Family planning issues were identified in 75 percent of the cases examined by the FIMR Case Review Team from 2011-2013. Sixty-four percent of the FIMR cases were unplanned pregnancy and nearly 20 percent were undesired pregnancies. Birth spacing was inadequate in 26 percent of cases.

Prenatal care was an issue in many of the cases. Forty percent of women entered in prenatal care late – after the 13th week of pregnancy – while 15 percent received inconsistent prenatal care and 14 percent did not receive any prenatal care.

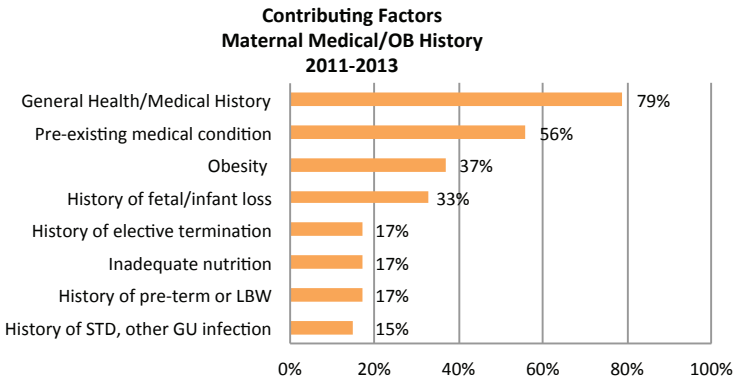
Substance abuse was prevalent in 31 percent of cases reviewed.



MATERNAL MEDICAL HISTORY

Nearly 80 percent of all cases reviewed had maternal medical history issues as a contributing factor from 2011-2013. Pre-pregnancy conditions like diabetes, hypertension and asthma were identified in more than half of the cases (56 percent). A history of sexually transmitted diseases and other genitourinary (GU) infections was found in 17 percent of cases.

Obesity was a factor in 37 percent of cases, while inadequate nutrition played a role in 17 percent of cases. Inadequate nutrition includes an underweight body mass index (BMI) or anemia at the first trimester prenatal care visit.



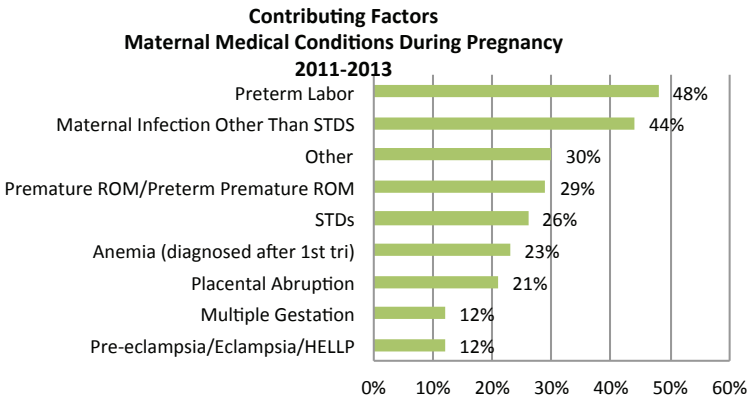
A history of a previous fetal or infant loss was present in a third of the cases (33 percent), while a previous poor outcome – pre-term or low birth weight baby – was present in 17 percent of cases.

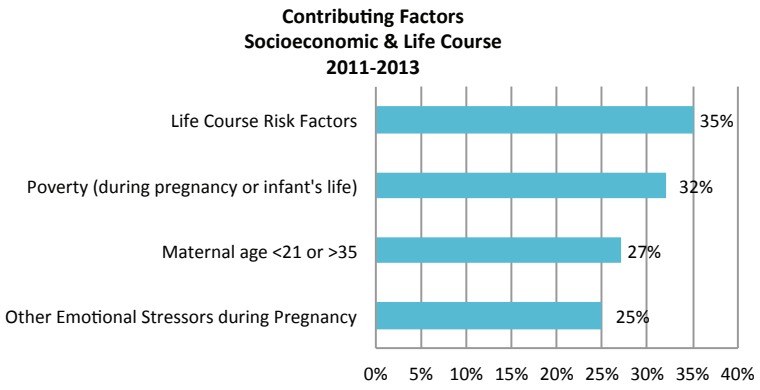
MATERNAL MEDICAL CONDITIONS DURING PREGNANCY

Maternal medical conditions during pregnancy were cited in 93 percent of the cases examined during 2011-2013. In 44 percent of the cases, maternal infections other than STDs were present. STDs were present in a quarter of cases, but after a rise in prevalence, they have been trending downward for the latter two years of the review period. Placental abruption (21 percent) and premature rupture of membranes/preterm premature rupture of membranes (29 percent) were identified in the cases. Preterm labor was present in 48 percent of cases.

SOCIOECONOMIC & LIFE COURSE ISSUES

Issues that women face prior to and during pregnancy were found in more than two-thirds of the FIMR cases reviewed. Life course perspective risk factors – issues that exist over the course of a woman's life that impact the health of her and her baby – were present in 35 percent of the cases. These risk factors include stressors in childhood, a history of abuse, poverty and lack of support. During pregnancy, mothers experienced poverty (32 percent) and other emotional stressors such as the loss of a job, loss of a loved one, incarceration, divorce, etc. (25 percent).





FETAL & INFANT MEDICAL ISSUES

Fetal and infant medical issues were prevalent in nearly two-thirds of FIMR cases. Prematurity was a contributing factor in 46 percent of all cases, however it does not apply to fetal deaths. Nearly all infant deaths reviewed had prematurity identified as a contributing factor. Additional factors identified in case reviews were infections (40 percent) and cord problems (11 percent).

DISPARITIES IN CONTRIBUTING FACTORS

Black mothers who experience 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.

PROVIDER & SERVICE ISSUES

Healthy Start screening was not evident in 12 percent of the FIMR cases. In only two percent of cases was screening done with a score indicating risk but no referral given. Service issues were identified in 17 percent of cases: 12 percent of patients feared or were dissatisfied with the system, five percent had medical and social service/community resources available but did not use them and two percent had medical and social service/community resources that were available but were inadequate to meet their needs.

PROJECT IMPACT COMMUNITY ACTION RECOMMENDATIONS

1. Continue to focus on preventing sleep-related deaths. The number of sleep-related deaths has increased over the last three years. The number of deaths for years 2011, 2012 and 2013 were 14, 21 and 26 respectively. When compared to all causes of death in infants for years 2011, 2012 and 2013, this represents 13%, 16.5%, and 18.4%, respectively. Education should focus on babies sleeping alone on a safe sleep surface.

Potential partners include:

a. Healthy Mothers Health Babies – Karen Smithson Memorial fund for Cribs 4 Kids program
b. AmeriCorps
c. Faith-based organizations for "Safe Sleep Sundays"
d. Make a Noise! Make a Difference!
   – Curriculum for health advisors
e. Baptist Community Health
   – Video link
f. National SIDS Foundation
   – Free educational materials
g. WIC
   – Include safe sleep in breastfeeding courses
h. CDC
   – Video to use in educational settings
i. City Match
   – LifeCourse board game
j. The Players Center For Child Health at Wolfson Children's Hospital-
   – Ready, Set Sleep program
   – Safe Kids Coalition

2. Continue to focus on dangers of smoking during pregnancy. The Community Action Team's "Don't Blow Smoke" campaign is gaining momentum. Phase I (target area-Health Zone 1) and Phase 2 (social media and expansion outside the target area to include the 32218 and 32244 zip codes) have been implemented. The percentage of moms in the death cohort that self-reported tobacco use was 12 percent in 2012. It rose to 15 percent in 2013. Self-reported tobacco use in the 2013 birth cohort is 6.9 percent.

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CHARTS, Florida Vital Statistics, 2013 Florida Department of Health; Project **Impact** Summaries of Case Review Team Deliberations, January 2011-December 2013.

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