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. In 2014-15, 28 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 monthly 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.

A Community Action Team (CAT) works to implement FIMR recommendations.

One hundred forty-three babies in Northeast Florida died before their first birthday in 2014 — meaning eight classes of kindergartners will not start school in five years. The infant mortality rate remained steady 8 deaths per 1000 live births in the region. This number well exceeds the state rate of 6 deaths per 1000 live births and the national rate of 6.1 deaths.

The black and other nonwhite infant mortality rate rose, while the white infant mortality rate fell. The disparity is significant — black babies are more than two and a half times as likely to die before their first birthday than white babies.

Duval County had the highest infant mortality rate at 8.8 deaths per 1000 live births, while Nassau County had the lowest at 5.4 deaths. Baker County had the largest fluctuation – the rate decreased from 14.3 deaths per 1000 live births to 5.5 deaths. Rates in small counties like Baker and Nassau can fluctuate significantly from year to year, as a few additional or less deaths impact the rate much more than larger counties.

St. Johns County experienced a large increase in infant mortality in 2013. The county had the same number of deaths in 2014 but the rate per 1000 decreased as there were fewer babies born in 2014.
THREE JACKSONVILLE ZIP CODES SEE SIGNIFICANT RISE IN INFANT MORTALITY

The landscape of infant deaths in Duval County has altered over the last few years, with rates improving in historically high areas of the city like Health Zone 1 and rising in three new zip codes: 32210, 32211 and 32218. Premature birth is the leading cause of death in all three zip codes.

More than a quarter (26 percent) of the 143 infant deaths in Northeast Florida in 2014 were in these zip codes. Analysis by the FIMR Case Review Team found that black babies were more likely to die and prematurity, particularly very premature birth, was the cause in two-thirds of all cases. Sleep-related deaths, which have increased in the region over the last few years, accounted for twenty percent of the deaths.

The Community Action Team developed and implemented a survey to capture the community’s input related to co-sleeping. Results will be available in late 2015.

INFANT CAUSE OF DEATH, 2014

- Prematurity/LBW, 30
- Congenital Anomalies, 23
- Other Perinatal Conditions, 45
- Sudden Unexpected Infant Deaths, 24
- Other Causes, 8
- Infections, 4
- Injuries, 9

LOW BIRTH WEIGHT, 2014

- Very low birth weight
- Low birth weight
- Birth weight >2500 gms

NEFL: 89.85%
White: 92.68%
Black: 89.85%
SLEEP-RELATED DEATHS

Sleep-related deaths are a leading cause of postneonatal deaths (from 28 to 364 days of age). Twenty-four babies died from Sudden Unexplained Infant Deaths (SUIDs) in 2014, down two deaths from 2013. These largely preventable deaths account for 16.8 percent of all infant deaths. Twenty of the deaths were classified as Sudden Infant Death Syndrome (SIDS), while unsafe sleep conditions were found in 13 cases. Four babies died while cosleeping (or bedsharing) with an adult, while nine died in an unsafe sleep environment (adult bed, lying on his or her stomach, sleeping with soft items such as blankets, pillows or comforters).

Babies are safest alone, on their backs and in a crib.

PERCENTAGE OF DEATHS ATTRIBUTED TO SUIDS

COALITION PARTICIPATES IN STATE COLIN

The Northeast Florida Healthy Start Coalition is participating in the new infant mortality Collaborative Improvement and Innovation Network (CollIN) initiative in Florida.

Florida CollIN is comprised of individuals with a special interest and expertise in one of the following targeted focus areas: Safe Sleep, Smoking Cessation, and Social Determinants of Health. The first state CollIN meeting was held in March 2015. Over the course of 18 months, the three groups will work together to share ideas and information and develop strategies to reduce infant mortality.

The Coalition will participate in the safe sleep and social determinants of health areas. Safe sleep deaths in the region have been on the rise in recent years, while the social determinants of health have been determined to have a significant impact on birth outcomes and are a priority focus of the Magnolia Project, the Coalition’s federal Healthy Start program.

SPECIAL FIMR PROJECT: ST. JOHNS COUNTY

After experiencing five years of significant declines in the infant mortality rate, St. Johns County had a significant rise in the infant death rate in 2013 and 2014. A special FIMR project was undertaken to determine what is impacting birth outcomes. A total of 23 St. Johns County cases were reviewed.

Strengths identified in the cases include private insurance, father of the baby involved, stable financial status and early prenatal care. But maternal medical and OB history had a significant impact: pre-existing conditions found in 78 percent of cases (asthma, hypertension, diabetes, mental health disorders); history of a previous infant or fetal loss in 43 percent; obesity in 30 percent; history of elective termination in 26 percent and maternal age >35 in 30 percent.

Prematurity was a contributing issue to the majority of deaths. Unsafe sleep conditions contributed to most of the remainder of deaths – including sleeping on an adult bed, couch or chair and/or with others.
CHILDHOOD & ADOLESCENCE

TEEN BIRTH RATES DOWN BUT DISPARITIES STILL EXIST, STD RATES REMAIN HIGH

Teen birth rates have reached historic lows. Teen parents make up a small portion of new mothers and fewer teen parents are having subsequent births before leaving their teens. Locally, many young teens still experience primary and repeat teen pregnancies, particularly in minority communities and among certain high-risk populations.

Black and other non-white teens have babies at significantly higher rates than white mothers. The teen birth rate for black teens in 2014 was 75 percent higher than the rate for white teens. Youth in foster care and the juvenile justice system are also high-risk groups for teen pregnancy and births. Within Northeast Florida, Baker and Duval counties have the highest teen birth rates.

The rates of sexually transmitted diseases (STD) – particularly among females ages 15-19 – exceed the national and state rates. The bacterial STD rate for 15-19 year olds in Northeast Florida was 25 percent higher than the state rate.

TEEN BIRTH RATE BY COUNTY

The NEFL Teen Pregnancy Task Force is working to improve adolescent reproductive health care by continuing efforts to support grassroots programming and launching new efforts to address public policy and health disparities.

The Task Force’s Public Policy Committee held “Undercurrents: A conversation on Adolescent Sexual Health” on May 18, an event that brought together a diverse group of community members and partners to learn how to leverage the work that’s already been done to build a brighter, healthier future for youth.

The Task Force, a collaboration of community organizations and systems, has been working to improve teen health outcomes since 2010. After reconvening following a several-year hiatus, the group recently released the May 2015 update to “Preventing Teen Pregnancy in Northeast Florida: A plan for community action,” which includes additional strategies to fill gaps in services and address specific at-risk groups.

The Community Action Team has been implementing a multi-year anti-smoking campaign based on the recommendation to address smoking as a major risk factor impacting birth outcomes. The first phase was a logo design contest with adolescents, while phase two was a teen anti-smoking video contest on social media. The Team continues to promote anti-smoking messages for youth through social media.
TEEN HEALTH PROJECT REACHES TEENS, PARENTS WITH SAFE SEX INFORMATION

The Coalition continues to implement the Teen Health Project in Clay, Duval and Nassau counties for teenagers ages 12-18 to reduce the rates of teen births and sexually transmitted infections. The program consists of three components: a comprehensive sex education series for teens; parent workshops; and six-month teen leadership councils.

More youth are confident in their ability to prevent teen pregnancy and sexually transmitted diseases and parents are more likely to have conversations with their adolescents about sex, according to the 4Me Teen Health Project evaluation.

PRECONCEPTION

PRECONCEPTION HEALTH PLAYS MAJOR ROLE IN BIRTH OUTCOMES

The health of a mother prior to pregnancy has historically had the biggest impact on birth outcomes in the region. Maintaining a healthy weight, having a healthy blood pressure and managing or controlling medical conditions are all important for women – whether they are planning to get pregnant or not. Healthy eating, getting exercise, taking folic acid daily and avoiding drugs and alcohol are all ways women can achieve good preconception health.

Poor preconception health was a contributing factor in a large proportion of the 2014-15 FIMR cases. Maternal medical conditions prior to pregnancy – like hypertension, diabetes and more – were a contributing factor in nearly 80 percent of cases. Obesity was present in nearly 40 percent of the cases, while inadequate nutrition was present in 29 percent of cases.

FIMR CASE CONTRIBUTING FACTORS

- Pre-existing medical conditions: 79%
- Obesity: 39%
- Inadequate nutrition: 29%

Source: July 2014-June 2015 FIMR Case Reviews. N=28
*Multiple factors may be present in individual cases

LONG ACTING REVERSIBLE CONTRACEPTION

Long acting reversible contraception was identified by the Coalition as an important tool in preventing unplanned pregnancies at the 2014 annual FIMR community meeting. The Coalition chose to continue and expand LARC promotion and education. Several efforts are underway:

- A discussion group was formed this year to discuss the benefits and barriers associated with Long Acting Reversible Contraceptives (LARC). The group was formed because not only are half of all pregnancies in the region unplanned, but FIMR data from 2011-2013 indicates nearly two-thirds – 64 percent – of the infant deaths were unplanned pregnancies.
- The Magnolia Project offers contraceptive counseling as a stand alone intervention that focuses on the most effective to the least effective contraceptive method, including utilizing a video that was developed specifically for use in case management.
- All youth that complete the 4Me Teen Health Project are provided an extensive demonstration of the different contraceptive methods, beginning with the LARCs. During the parent workshop component of the program, the parents watch the LARC video developed by the Magnolia Project to increase their knowledge of effective methods to prevent pregnancy.
PREGNANCY & CHILDBIRTH

HEALTH, SUPPORT DURING PREGNANCY IMPORTANT TO IMPROVE OUTCOMES

Babies born to healthy moms are more likely to be healthy themselves. There are many things women can do during pregnancy to make sure their babies have a healthy start.

Social services like Healthy Start can have a positive impact on pregnancy, helping moms mitigate risk factors through support, referrals and education. Approximately 72 percent of pregnant women in the region complete a Healthy Start screen – which assesses their risk and provides a means for referral into both Healthy Start and Healthy Families – compared to only 61 percent of the FIMR cases.

Life-course and socioeconomic factors like poverty, emotional stressors, racism and age can also impact pregnancy.

Thirty-six percent of the 2014-15 FIMR cases included a history of fetal or infant loss, while another 21 percent had a history of a previous pre-term or low birthweight baby. An additional 21 percent had a sexually transmitted disease during pregnancy.

The Community Action Team developed “Thank my lucky LARCs,” a long acting reversible contraception information card for distribution at the Magnolia Project and in the community. The card gives an overview, advantages and disadvantages of the hormonal intrauterine device (IUD), the copper IUD and the implant. The three methods are effective from three to 10 years.

The Magnolia Project piloted a primary care program, offering services one day week in the clinic in addition to the women’s health services. Magnolia participants that utilize clinical services have the opportunity to receive primary care to help them manage other health conditions, such as hypertension and diabetes.

The National Preconception Health Care Initiative was designed to help primary care providers, their colleagues and their practices incorporate preconception health into routine care of women of childbearing age. Dr. Dan J. Frayne, MD Co-Chair, Clinical Working Group Preconception Health Care Initiative facilitated the trainings along with Sarah Verbiest, DrPH Executive Director UNC Center for Maternal and Infant Health.

PREGNANCY & CHILDBIRTH

PROJECT IMPACT
FETAL DEATHS RISE IN 2014

The number of fetal deaths or stillbirths rose significantly in Northeast Florida in 2014 – by 23 percent from 115 to 149 deaths. Fetal mortality includes deaths that occur before birth following at least 20 weeks gestation. The greatest number of both black and white fetal deaths occurred between 21 and 23 weeks.

The fetal mortality rate for the five-county area was 8.3 deaths per 1000 live births in 2014, an increase from previous years. The rate was the highest it has been in the region since 1995. The rate for blacks and other nonwhites was twice as high as the white rate – 12.1 deaths per 1000 live births, compared to 6.2 white deaths.

HEALTHY START IMPLEMENTING NEW EFFORTS TO REACH, SERVE WOMEN

Several new initiatives are underway in Northeast Florida to better serve women through the Healthy Start program. Healthy Start provides targeted support services that address identified risks to pregnant women, infants and children up to age three.

The Coalition is currently developing a screening education tool for the doctors offices that administer the Healthy Start screen, the main source of entrance into the program. The tool intends to convey the importance of filling out the screen, but more importantly what Healthy Start can do for the providers and their clients.

All Healthy Start program providers in the region are now contractually required to provide an Edinburgh post partum depression screen to their clients. An assessment will be done prenatally, one time during the postpartum period and also while following an infant if the provider deems it necessary. The screening will help the care coordinators better identify women in need of mental health services.

The Community Action Team continues to take the Life Course game into the community, playing it with teens, young adults, counselors, social services staff and more to help them understand the social determinants of health. The game, which was developed by CityMatch, is an interactive method of seeing the effects of the life course.
CASE REVIEW TEAM RECOMMENDATIONS:

1. Sleep-related deaths declined in 2014, however safe sleep will remain a focus in the upcoming year. A specific focus will be placed on baby sleeping in his or her own bed as well as an environment that is free of hazards such as plush toys, pillows, bumper pads, blankets or comforters.

2. Maternal pre-existing conditions continue to be a factor evident in the reviews. A recommendation is made to approach providers who have contact with women of child bearing age and engage them to participate in a preconception health program to optimize a woman’s health before she becomes pregnant. Continue the Preconception Health Care Initiative that the Magnolia Project piloted; use this model to educate providers on the importance of preconception health.