Infant Mortality
St. Joseph County

The infant mortality rate is widely accepted as a strong indicator of the overall health and well being of a community, state or country. Indiana’s infant mortality rate of 7.2 deaths/1000 births is ranked 43rd in the United States. The rate in St. Joseph County is 7.5. The FIMR Program uses a process of data collection and case review to examine the social, economic, health, education, environmental, safety and system issues that contribute to infant mortality. The data collected includes medical record information and interviews with mothers and families. Using this data, the FIMR team is able to develop recommendations for community action to improve outcomes for mothers and babies.

Causes of Infant Mortality 2015-2018

In St. Joseph County, 63% of infant deaths are due to complications of prematurity. A full term pregnancy is 40 weeks long and these infants were born at an average of 22 weeks gestation due to preterm labor or maternal complications. 17% of infant deaths in St. Joseph County are due to Sudden Unexpected Infant Death that can include: Sudden Infant Death Syndrome (SIDS), accidental asphyxiation or an undetermined cause. The remaining deaths are from congenital anomalies or other medical issues. The number of deaths from 2017 to 2018 decreased from 36 to 25, entirely due to a drop in the incidence of Sudden Unexpected Infant Deaths related to unsafe sleep from 11 to 1 during the same time period.
Women's Health Before and Between Pregnancies

One of the most important ways to improve the health of infants at birth is improving the health and well-being of women prior to pregnancy. Some of the factors present in the infant mortality cases studied were: unintended pregnancies, mental health diagnoses, tobacco use during pregnancy and pre-existing chronic diseases, especially high blood pressure. In the cases where complications of prematurity were the cause of infant death, nearly 80% of mothers began prenatal care by 12 weeks gestation and 90% began care by 14 weeks. Prenatal care (monthly visits to a clinical provider to assess maternal blood pressure, weight gain and other issues) is essential to identifying complications that occur during pregnancy, however, beginning a pregnancy in good health is also vital to improving infant and maternal mortality.

In August of 2019, the FIMR Program, with a grant from Beacon Community Impact, will partner with Power to Decide to bring the One Key Question ® (OKQ) initiative to our community. OKQ is used by primary care providers, OB/GYNs and community based agencies to prompt discussions with women about their pregnancy intentions. Asking "Would You Like To Become Pregnant in the Next Year?" and the discussion that follows, is culturally sensitive and removes assumptions about a woman’s plans, allowing her to share her preference for herself, her family and to work with her provider to find the best steps to either plan a healthy pregnancy or decide on a family planning method to prevent pregnancy.

A Few Words about Partners

It’s natural to focus on women’s health when we talk about having a healthy baby, but men play an important role in healthy pregnancies too.

If the father of the baby smokes, the second hand smoke can contribute to complications during pregnancy and after the baby is born. In the majority of the cases of infant loss studied in the FIMR program, the baby’s father was present and supportive to the mother. Having her partner’s presence and support during pregnancy is known to help reduce a mother’s stress and improve pregnancy outcomes.

Fetal Movement Count App to Reduce Stillbirth

The St. Joseph County FIMR Team reviewed 38 cases of stillbirth (20 weeks or later) for the years 2017 and 2018. In the 19 cases where the stillbirth took place during the third trimester, 58% of the mothers experienced decreased fetal movement ranging from a few hours to a few days leading up to the identification of the fetal loss. Keeping track of daily movement counts, at the same time each day, helps mothers get to know their babies’ regular activity so they can tell their medical provider right away if they notice a decrease in or change in the baby’s movements.

Developed by families who experienced stillbirth, the Count the Kicks app is credited with reducing the rate of stillbirths in Iowa by nearly 29% since 2009.

“One straightforward question can start conversations about contraception and career goals or limiting caffeine use and quitting smoking. A provider’s role is to ask, what can we help with to make a reproductive health plan for you? Not to decide for you what’s right or wrong.”

Dr. Kristina Box, Indiana State Health Commissioner

Journal & Courier, April 26, 2019
Sudden Unexpected Infant Death (SUID)

Sudden Unexpected Infant Death is the unexpected death of an infant less than one year of age and includes Sudden Infant Death Syndrome, Accidental Asphyxia or Strangulation and Undetermined causes.

In 2017, as St. Joseph County experienced a significant increase (11) in SUID with associated unsafe sleep practices, the FIMR Community Action Team worked with Saint Joseph Health System, Beacon Health System and community agencies to launch a consistent safe sleep message for families called, “Stay Close. Sleep Apart.”

In 2018, the county had 1 infant death due to SUID. While it is difficult to attribute this decrease to the “Stay Close. Sleep Apart.” campaign, the decrease is encouraging.

The main factors present in cases of SUID were sharing an adult bed with a one or both parents or a sibling, the presence of pillows, blankets, or other items including boppy positioners. Nearly 50% of infants were exposed to tobacco during pregnancy. Of the 16 infants who died from SUID from 2015 to 2018, several had medical complications during delivery including prematurity, breathing difficulties or infection.

None of the babies who died from SUID in St. Joseph County from 2015 through 2018 were put to sleep using the:

ABC’s Of Safe Sleep

Babies Should Sleep:

- Alone.
- On their Back.
- Without pillows, blankets, toys, bumpers, boppys or other items.
- In their own Crib; bassinet or pack and play
- In the same room, close to you for the first year.
- Don’t smoke during pregnancy or after your baby is born.
- Never sleep with or place a baby on a soft surface, car seat, chair or sofa to sleep.
- Breastfeeding, if possible, for any period of time is protective against SIDS.

Smoking during pregnancy Doubles the risk of sudden death for infants.

Smoking 1 PACK PER DAY Triples the risk of sudden death for infants.

The FIMR team recognizes that opinions about infant sleep are personal and cultural, however, any decisions about infant sleep must follow the guidelines of placing a baby on their back, on a firm, flat surface without blankets, toys, or pillows, for the first year; for every sleep.

Families should ask their baby’s doctor about safe sleep.

*Parental drug use at the time of the infant death was not a significant factor in St. Joseph County cases. And no infant was sharing a bed with a non-parent adult.
Maternal Mortality in Indiana

Indiana ranks 48th in the country for rate of maternal deaths, at 41 per 100,000 births. This is 10 times the rate of the best state and twice the national average. Maternal deaths include the death of a woman during pregnancy through 1 year postpartum. In 2018, a Maternal Mortality Review Committee, similar to FIMR was started by the Indiana State Department of Health. The St. Joseph County FIMR Coordinator serves on the MMR committee. Like FIMR, the MMR Committee will also release an annual report to the public.

Maternal Interviews

30% of mothers participate in an interview with the FIMR program to share the story of their pregnancy and baby’s life. Learning from the perspective of the mother and her family is essential to the FIMR team’s ability to identify system and community factors that may contribute to barriers to care. The FIMR Program is currently working on a project with the University of Notre Dame to study mothers’ stories in more detail.

Racial Disparities in Infant Mortality

In the United States, the infant mortality rate for black infants is 2.5 times the rate for white infants. In St. Joseph County, the disparity is nearly 4 fold. A growing body of research on this issue makes clear that the stress of life as a woman of color, including the stressors of racism, poverty, access to resources and education contribute to this disparity. Even when controlled for education and income, the disparity remains, suggesting that the presence of structural racism and implicit bias within our system also contribute to disparities in infant and maternal health.

The FIMR Program’s partnership with the City of South Bend and Beacon Health System’s My Brother’s Keeper, is focused on addressing these disparities and engaging community partners to insure that infants of color have the healthiest start in life.

Home Visiting to Support Mothers During Pregnancy.

Income, Racism, Employment, Education, Food insecurity, Child Care, Safety, Housing

The health and well-being of a woman prior to pregnancy is also dependent upon the socio-economic factors present in her life. To help women and families increase their opportunities, overcome obstacles and navigate the insurance and health care systems, the FIMR team is working with community partners who offer home visiting programs to increase the availability and utilization of this support for mothers, infants and families during and after pregnancy.

The effectiveness of home visiting for reducing pregnancy complications is widely supported through research. St. Joseph County has several programs available to help moms and families including: Beacon Perinatal Care Coordination, Healthy Families, and Nurse Family Partnership (available, October 2019).
Adolescents and Reproductive Health

Similar to most of the country, the teen birth rate in Indiana decreased 61% between 1991 and 2016. However, Indiana’s birth rate of 26 births/1000 girls, ages 15-19, is several points higher than the national average and nearly 3 times the rate of the best state. Of the cases of fetal and infant loss in SJC, 9% are to mothers ages 15-19. In general, younger teens are more likely to experience complications during pregnancies. In cases from 2015 through 2016, the infant mortality rate for mothers 15-17 was 23 deaths/1000 births compared to 5.6 for mothers 18-19 years old.

Adolescents, whether girls or boys, benefit from comprehensive, evidence-based information about reproductive health and pregnancy intention including where they can turn for support. The FIMR Preconception Health Workgroup is exploring how to work with schools to change the way we approach reproductive health so that teens consider decisions about sexuality and pregnancy intention in terms of their goals for family, education and employment.

“The states with the lowest infant mortality rates start out with the healthiest mothers.”

Indiana Perinatal Quality Improvement Collaborative

Public Policy and Infant Mortality

Best in Midwest by 2024

Governor Holcomb set a goal for Indiana to be Best in the Midwest for infant mortality by 2024. Currently, Indiana is last in the Midwest, so reaching this goal will require attention to the initiatives discussed in this report and public policies that improve the overall health and well-being of families.

The 2019 General Assembly passed several laws that will:

- Fund the development of an OB Navigator program that will employ nurses to connect mothers to community resources.
- Require universal verbal screening of pregnant women for substance abuse disorders.
- Provide FIMR programs with the same procedural authority that guides the work of county Child Fatality Review teams.
- Fund the state Maternal Mortality Review Committee.
- Allow teens, 16 and older, to access prenatal care without parental consent, when parents are not supportive.

Policies that are effective in other states for reducing infant mortality can also be considered in Indiana and include:

⇒ Increasing cigarette taxes and smoking age
⇒ Increase minimum wage
⇒ Increase amount of direct TANF payments to families
⇒ Implement paid family leave
FIMR Case Review and Community Action Team Members include physicians, nurses, social workers, public health and community leaders from these health systems and agencies.

Great thanks to these companies for their support of the FIMR Program through donations: