Douglas County Health Department

Fetal and Infant Mortality Review (FIMR) 2012 Annual Report

DOUGLAS COUNTY Health Department

FIMR

Baby Blossoms

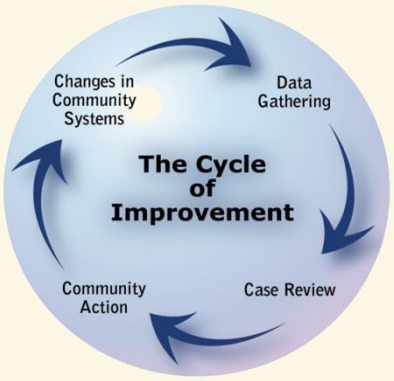
Partnering to Prevent Infant Mortality

Coordinated by the Douglas County Health Department

INTRODUCTION

The Baby Blossoms Collaborative (BBC) initiated the FIMR process in 2006 to address feto-infant mortality in Douglas County. The FIMR process brings a community team together to examine confidential, de-identified cases of feto- infant deaths. The purpose of these reviews is to understand how a wide array of local, social, economic, public health, educational, environmental and safety issues relate to the tragedy of feto- infant loss. Having gained a comprehensive understanding of these issues from the data analysis and case reviews; a broad forum of interested community leaders, elected officials, providers, agencies, advocates and consumers are able to reason together and act to improve services.

The Douglas County Health Department uses a nationally recognized best practice model known as the FIMR Cycle of Improvement (illustrated on the right).



Key steps of the FIMR process include the following:

- Information about the feto- infant death is gathered. Sources include public health and medical records.
- An interview is conducted with the mother who has suffered a loss and permits the interview to be conducted. The FIMR Public Health Nurse, who is trained in grief counseling, assesses the needs of the family and refers to bereavement support and community resources.
- The Case Review Team (CRT), comprised of health, social service, other experts and interested citizens from the community, review the case summary information (gathered from the medical record and maternal interview), identify contributing factors, and make recommendations for community change.
- The Community Action Team (CAT), a diverse group of community members/leaders, review CRT recommendations, prioritize identified issues, and design and implement interventions to improve community service systems and resources.

As a result, the FIMR structure and process creates a setting and activities where everyone has a contribution to make and everyone learns from the process.

This report will highlight the four unique components of the FIMR Cycle of Improvement as experienced in Douglas County. In addition, each section will highlight recommendations to ensure fidelity to each component of the FIMR process.

HIGHLIGHTS OF 1st COMPONENT OR DATA GATHERING:

In Douglas County, the three components of 1.) population-based data, 2.) vital statistics and 3.) PRAMS data are matched with research to help define critical community issues. This process assists with case selection and enhances the knowledge of what women experience in our community. The following information is taken primarily from 2011 population-based data and vital statistics information.

- Overall, in Douglas County the feto-infant mortality rate has decreased from 10.7 in 1993-96 to 7.7 in 2008-11.
- In 2008-11 Black mothers continued to experience higher feto-infant death rates than white mothers, especially in maternal and infant health periods, at a rate of 13.5 compared to 6.7 respectively, nearly a 2- fold difference.
- Population-based data shows that cases where mothers have experienced feto-infant death from prematurity-related complications, specifically those with a very low birth weight (VLBW) of

1500 grams or less, and/or SIDS/SUIDS, lead all other single causes of the county's feto-infant mortality and were therefore prioritized for further review.

- Hispanic feto-infant mortality rates are now available and, in 2008-2011, the rate of 7.5 for the Hispanic population reflects an increase over the 2007-10 rate of 6.8, and now places the Hispanic population at a higher feto-infant mortality rate than their white counterparts.

DCHD Recommendation –
Maintain reliable data sources supported by valid (evidence-based) research.

HIGHLIGHTS OF 2nd COMPONENT OR CASE REVIEW[i]:

Below is a summary of cases reviewed over the last 12 months using the following selection criteria: 1.) Douglas County resident, 2.) feto-infant loss occurring after at least 20 weeks of pregnancy through one year of age, and 3.) selection criteria of prematurity, specifically those of a VLBW, and/or SIDS/SUID.

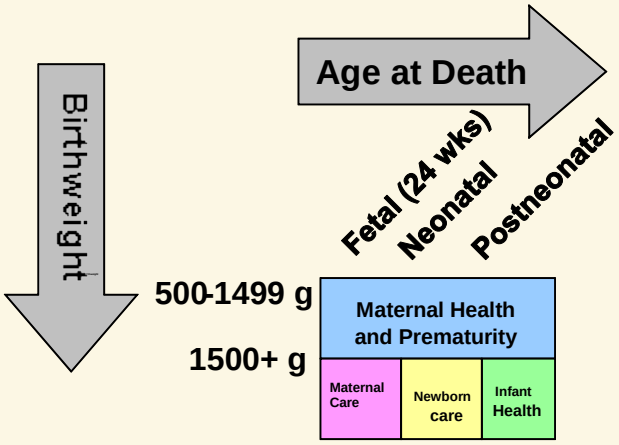
- Based on PPOR data, infant death cases of prematurity with a VLBW and/or SIDS/ SUID were prioritized for review. i
- 35 cases were reviewed from January 1, 2012 to December 31, 2012 (19 fetal/ 16 infant) for a total of 195 cases since 2006.
- 37% of cases were reviewed less than 3 months after death, while 52% were reviewed less than 6 months after death.
- We achieved contact with 21 out of 35 cases, and 15 of these cases (44%) resulting in a home interview.

Perinatal Periods of Risk (PPOR):

The Perinatal Periods of Risk (PPOR) is both a community approach and an analytic framework for investigating and addressing high infant mortality rates in urban settings. It is an effective way for communities to mobilize and prioritize actions based on the best evidence available. This data becomes available to BBC in April of each year, and includes final numbers from 2 years previous, combined with preliminary numbers from the year that just ended. For that reason, the population based data in the Annual FIMR Report is typically one year behind the current reporting year.

The PPOR approach examines fetal and infant mortality in two dimensions. The first dimension is Birth Weight (represented on the y-axis) and the second dimension is Age at Death (represented on the x-axis). The four Perinatal Periods of Risk (maternal health/prematurity, maternal care, newborn care and infant health) are named to suggest prevention areas. Each period of risk is associated with its own set of risk and prevention factors. Please see the diagram on the next page. In addition, more specific information can also be found at: http://www.citymatch.org/

The PPOR Map of Feto-Infant Mortality



Utilizing data gained from vital statistics, PRAMS and research, community stakeholders have identified maternal health/prematurity(blue box), maternal care (pink box) and infant health (green box), as the areas that drive the Douglas County feto-infant mortality rates, with newborn care playing a lesser role. The chart below compartmentalizes the contributing factors most frequently noted in feto-infant death case review within the PPOR framework.

CRT findings related to PPOR Map of Fetal-Infant Deaths (2012)

Maternal Health/ Prematurity – Preconception Health

Medical condition of mom		Medical condition of fetal/infant
Services provided	Family planning	Mental health/stress
Cultural	Payment for care	Substance Abuse

Maternal Care (fetal deaths)-
Prenatal care

- Medical mom
- Medical fetal/infant
- Services provided
- Mental health/stress
- Culture
- Prenatal care
- Substance Abuse
- Documentation

Newborn Care

Infant Health (live births)-
Safe sleep environment

- Medical infant
- Service provided
- Mental health/stress
- Culture
- Sleep environment
- Substance Abuse
- Documentation

The frequency with which these contributing factors occur help shape the community response to the feto-infants deaths in Douglas County. Based on an analysis of 2012 data, "Maternal Health-Prematurity", "Maternal Care" and the "Infant Health" periods of risk areas comprise the greatest contribution to the overall feto- infant mortality rates in Douglas County.

DCHD Recommendations:

1. **Rebuild the FIMR referral system in an effort to increase the review of cases < 3 months after death.**
2. **Increase community awareness by promoting FIMR .**
3. **Increase interactions with mothers of loss through the use of incentives to encourage participation in the maternal interview.**

HIGHLIGHTS OF 3rd and 4th COMPONENTS (COMMUNITY ACTION AND SYSTEM CHANGE):

Douglas County Health Department engages a range of community partners through the Baby Blossoms Collaborative to address the contributing factors and recommendations identified in the data and case review process. The year 2010 began a two year cycle to ensure that the systems changes implemented by BBC are substantial and sustainable. The Calendar of Community Improvement listed below identifies the activities implemented in even and odd years**.**

Baby Blossoms Calendar of Community Improvement

EVEN NUMBERED YEARS (2012)

January	April	July	October
Unveil BBC Community Report and Community Action Plan	Present biannual data including PPOR.	Present Case Review Team findings of contributing factors.	Evaluate local capacity and need in relation to Case Review Team findings.

ODD NUMBERED YEARS (2013)

January	April	July	October
Present research and best practice activities	Present update in data including PPOR.	Present biannual recommendations from Case Review Team findings.	Develop Community Action Plan complete with milestones and actionable strategies.

Pages 5-7 list the components of the Community Action Plan (CAP), established in October 2011, in addition to the progress associated with its execution. Since being implemented (2012) over a 2 year period, workgroups have met on a regular basis with numerous objectives being completed Year 1. The following table highlights the progress made on the CAP by the Community Action Team (CAT) up to this point in time.

CAT: **Preconception Health**
Goal A

- Provide access of the knowledge and skill of the Life Course Model to every family in Douglas County to **ensure future positive birth outcomes across generations**.

Contributing Factors	Objectives	Progress Report
• *Lack of birth control* • *Unintended pregnancy* • *Single parent* • *Lack of partner support* • *Multiple life stressors* • *Financial concerns* • *Depression/ Mental illness (pre-existing)* • *Pregnancy spacing <18 months*	By December 31, 2014, integrate the 10 key Developmental Assets that relate to Preconception Health into the current curricula of a minimum of six youth serving agencies.	Identified 6 youth serving agencies: • Collective for Youth (multi-agency organization) • Omaha Housing Authority (OHA) • Child Saving Institute (CSI) • Nebraska Children's Home society (NCHS) • Completely Kids. Assessed all 6 agencies for suitability of Assets integration into their curriculum, and the identified agencies met the established suitability criteria. Identified past trainings the 6 youth-serving agencies had participated in (Life Course Model & 40 Developmental Assets). These trainings will serve as points of integration for the 10 key Developmental Assets that relate to Preconception Health. Identified age appropriate group which will provide a consumer perspective on the curriculum prior to implementation (Douglas County High School Youth Health Advisory Group) DCHD secured funding from NACCHO to assess the local Adolescent Health System Capacity. DCHD houses two sites for the national Personal Responsibility Education Program (PREP) for Nebraska DHHS (Teen Outreach Program).

CAT: Prenatal Care – Perinatal Depression
Goal B

- Create a coordinated community response system to perinatal depression which includes a tiered multi-disciplinary response for appropriate interventions.

Contributing Factors	Objectives	Progress Report
• *Maternal history of depression.* • *Depression/Mental illness during*	By December 31, 2014, select, modify, and/or design a tiered multi-disciplinary	Identified model of care (a best practice) for perinatal depression services (NICE clinical guidelines). All steps of model are being evaluated & modified as needed to best meet the needs of the

pregnancy/PP • *Multiple life stressors* • *Financial concerns* • *Unintended pregnancy* • *Lack of family support* • *Lack of grief support* • *Divorce/Separation*	model of best practice intervention for perinatal depression for Douglas County.	Douglas County community. Developed electronic mental health provider resource directory with emphasis on perinatal depression (in progress) to help create a centralized community response. Incorporated a link to the Nebraska Perinatal Depression Provider Curriculum (updated by DCHD staff) in the resource directory: http://www.hhs.state.ne.us/perinataldepression Identified referral sources for individuals who experience perinatal depression http://ppsupportomaha.webs.com/

CAT: Prenatal Care – Preterm Labor
Goal C

- To reduce preterm labor by educating the community.

Contributing Factors	Objectives	Progress Report
• *Late entry to prenatal care* • *Tobacco/substance use* • *Infections* • *Preterm labor* • *Unrecognized or delayed response to preterm labor* • *Prematurity* • *Extremely low birth weight* • *Previous fetal loss*	By July 31, 2012, identify best practice(s) to reach various communities in Douglas County.	Identified 7 target communities that serve women of child-bearing age. These communities consist of 7 BBC partnering agencies: • Visiting Nurses Association (VNA) • NCHS • CSI • Federally Qualified Health Centers (3 total) • Omaha Healthy Start (OHS) • Essential Pregnancy Services • DCHD WIC Developed a survey to assist in determining the most effective communication strategies in educating the community on preterm labor. Partnering agencies will disseminate the survey to their respective client communities. DCHD secured funding from the March of Dimes to promote "Healthy Babies are Worth the Wait"

CAT: Safe Sleep
Goal D

- To increase awareness and access to resources to promote safe sleep practices.

Contributing Factors	Objectives	Progress Report
• *Co-sleeping/ soft bedding* • *Non back sleep position* • *Tobacco/substance use* • *Little or no breastfeeding* • *Infant in non-bed* • *Lack of adult supervision*	Promote use of safe sleep packet at the hospital (health systems) after delivery.	Developed and sent an email request to all Douglas County hospital systems asking them for information about their safe sleep educational practices. To date, 2 hospital systems have responded & both are utilizing the Safe Sleep video in addition to supplemental materials. Utilized BBC partners (Health Systems, FQHCs, Social Service Agencies, and VNA) to collate a "running inventory" of the protective ways that providers are educating clients about safe sleep environments. Currently, the inventory includes: classes, appointments and the importance of a continuous message that clients hear multiple times. Promoted the American Academy of Pediatric Recommendations on Safe Sleep Environments with Douglas County hospital systems.
	Monitor current legal standards/policies for safe sleep education for child care providers.	Supported the updating of regulations related to safe sleep environments for infants in childcare by giving testimony (BBC Coordinator) at the public hearing for Child Care Regulations on 8/23/12.

DCHD Recommendation:

Engage current and new partners to ensure implementation of CAP.

[i] Results are based on a *non-random* sample of deaths, and thus cannot be attributed to the overall population of Douglas County infant deaths