# FETAL & INFANT MORTALITY REVIEW 5 YEAR REPORT

### **Executive Summary**

2007 - 2011

## ACTIVITIES OF THE YOLO COUNTY FIMR TEAM & ANALYSIS OF LOCAL FIMR DATA



137 N. COTTONWOOD ST. WOODLAND, CA 95695 (530)666-8649

#### This report was prepared by:

Haydee Dabritz, PhD Epidemiologist

Constance Caldwell, MD Health Officer Anna Sutton, RN, PHN, MSN FIMR Coordinator

Jan Babb, RN, PNP, MSN MCAH Director

Special thanks goes to **Dr. Rick Baker**, retired Kaiser Pediatrician and FIMR Team member for his time in editing this report, **Victoria Conlu**, *RN*, *PHN* for detailed medical record review, data collection and entry and **Ashley Logins-Miller**, **Yolo County MCAH Office Support Specialist** for technical assistance in formatting and printing of this report. For more information about the FIMR Program, please contact the Yolo County MCAH Program at (530) 666-8645.

#### To download or access the complete 5 year report, please follow these steps:

- 1. www.yolohealth.org
- 2. Click on "Reports and Publications" on the left hand side
- 3. Click on "Maternal, Child & Adolescent Health" at the top of the page
- 4. Scroll down for the "2007-2011 Fetal Infant Mortality (FIMR) Data Report"

#### SUMMARY OF LOCAL FINDINGS

#### Fetal and infant mortality rates have remained stable over the past 10 years.

Yolo County mortality rates are below the State mortality rates in all categories except for fetal mortality (5.4 per 1000 for 2007-11), which is slightly higher but not significantly different from the State (5.0 per 1000 in 2010). Overall, fetal and infant death rates remain unchanged between the two FIMR reporting periods.

#### Prematurity is still a factor in fetal and infant deaths, especially for fetal deaths.

The percentage of fetal and infant deaths associated with prematurity increased from the previous reporting period (2002-2006) compared to the current reporting report (2007-2011). In particular, fetal deaths associated with prematurity rose significantly from 54% (2002-2006) to 78% (2007-2011).

#### Abnormalities seen at the time of birth are still a factor in fetal and infant deaths.

Rates of fetal and infant deaths associated with abnormalities seen at the time of birth (congenital abnormalities) remained unchanged between the two FIMR reporting periods.

Maternal health issues associated with fetal deaths remained unchanged between the two reporting periods, but a notable increase was seen in rates of infant deaths associated with maternal health issues. Important to note is that the following are all preventable risk factors.

**Maternal Obesity:** Rates of infant deaths associated with an obese mother **tripled** between the first reporting period (2002-2006) and second reporting period (2007-2011). In the first reporting period, **11%** of mothers were reported to be obese versus **34%** in the current period.

**Gestational Diabetes:** Rates of infant and fetal deaths associated with gestational diabetes **remained unchanged** between the two five year reporting periods. However, with rising rates of maternal obesity, the risk for gestational diabetes also goes up. Women with gestational diabetes and their offspring are at increased risk for diabetes later in life.

**Chronic maternal health problems:** Rates of infant deaths associated with chronic maternal health problems **more than doubled** between the two reporting periods. Rates went from 21% (2002-2006) to 45% (2007-2011).

*Maternal drug, alcohol or tobacco use:* Rates of infant deaths associated with maternal use of drugs, alcohol or tobacco use doubled between the two reporting periods. Rates went from 13% (2002-2006) to 28% (2007-2011).

Interpersonal Violence, Child Welfare (CWS) and/or Law Enforcement Involvement: Despite numbers being small, the prevalence of interpersonal violence/CWS and/or Law Enforcement involvement continues to be an issue and is now at 21% or one in five, higher than the previous 5-yr period. This particular maternal health issue is worth much discussion as there is tremendous opportunity for prevention and intervention.

Access to and continuity of healthcare between pregnancies: Rates for infant deaths associated with mothers having limited or no prenatal care more than tripled between the first and second FIMR reporting periods. Rates went from 13% (2002-2006) to 41% (2007-2011).

**Analysis using the Perinatal Period of Risk (PPOR) model** indicates a possible shortfall in the area of maternal health and maternal care further supporting the trends seen in maternal health issues between the two FIMR reporting periods.

#### *RECOMMENDATIONS*

Based on the work of the FIMR Program, community and health system activities to improve birth outcomes and decrease fetal and infant deaths should focus on the following:

- 1) Include the **preconception & interconception** time period.
- 2) Efforts to reduce barriers to early prenatal care should continue
- 3) Invest in evidence based models of intervention and support healthcare providers to help women achieve healthy weights and lifestyles before, during AND in-between pregnancies.
- 4) Develop policies and support a system of care to address maternal mental health issues, substance use/abuse, interpersonal violence and trauma.
- 5) Develop policies and programs that promote comprehensive maternal health and wellness from a Life Course Prospective. Systems of care must be multidisciplinary in their approach to serving the mental, physical and social needs of a woman of reproductive age. This approach takes into account the lifespan and life stage of the woman in determining a woman's health trajectory.
- 6) Communities, stakeholders and providers need policies and partnerships to foster and grow **protective** factors for mothers and their families. Understand the concept of the Social Determinants of Health which are a set of conditions that a person is born into that both promote and negatively impact an individual's health and life.
- 7) Think of mom and baby as ONE: as the science of **toxic stress** continues to grow, it becomes imperative for our community to view the mother and her child as a single unit even beyond birth. Breaking down medical silos that serve only the mother or only the child, especially in the first year of life is an important first step in promoting the health of an entire community.
- 8) Promote Safe Sleep environments to decrease the risk of SUIDS and SIDS. Agencies and providers need to work together to provide consistent and evidence based recommendations and support around the safest sleep environment for the baby.

"Children are our future & their mothers are its guardians"

-Kofi Annan 2001 Nobel Peace Prize Winner