

FIMR

OAKLAND COUNTY HEALTH DIVISION

Fetal & Infant MORTALITY REVIEW

November 2006

Everyone is responsible for healthy babies!

EXECUTIVE SUMMARY

*An examination of issues surrounding infant deaths
in Pontiac and Southfield Michigan from 2000 through 2004*



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W W W . O A K G O V . C O M / H E A L T H

*The Oakland County Health Division will not deny participation in its programs based on race, sex, religion, national origin, age or disability.
State and Federal eligibility requirements apply for certain programs.*

Introduction

For the past several years, Oakland County has worked aggressively at improving the maternal and infant health for Oakland County residents. Based on recent data, it appears that our efforts are having a positive impact in reducing our infant mortality rates. However, we continue to have pockets or specific areas of concern, which are highlighted in this report. This year, we chose to combine the data for the cities of Southfield and Pontiac. It is important to realize that these two communities are unique and that, while we combined the data for comparison, the outcomes for each community are very different. Oakland County is committed to reducing the disparity between African-American babies and white babies and to provide the community with available resources for successful outcomes.

This executive summary contains important data for both community members and our partners in human services for the Cities of Pontiac and Southfield to use for developing action plans that involve collaboration and best practices.

Infant Deaths in Oakland County

An infant death is defined as a baby born alive who dies prior to his or her first birthday. From September 2000 through December 2005 the Oakland County Fetal and Infant Mortality Review (FIMR) Case Review Team has reviewed all infant deaths in the cities of Pontiac and Southfield that occurred in the years 2000 to 2004 (141 cases).

Focus Areas

Although there are a variety of risk factors that have been identified by the FIMR Case Review Team, the full report addresses five major focus areas that contributed to infant deaths in Pontiac and Southfield:

- Prematurity
- Maternal and Infant Infections
- Inadequate Nutrition
- Smoking
- Positional Asphyxia

Focus Area 1: Prematurity

Prematurity was the leading cause of infant deaths in Pontiac and Southfield in the years 2000 to 2004. This is consistent with national data that shows prematurity as the leading cause of infant death in the first month of life. Out of the 141 FIMR cases reviewed, 106 infants were born preterm and 93 of those (66%) died from prematurity (the other 13 preterm infants died from other causes). Of those infants born prematurely, 76 had mothers who were African American (82.6%). Nationally, rates of premature birth vary by race/ethnicity. In 2002, rates for African American women were the highest among racial/ethnic subgroups.

Focus Area 2: Maternal and Infant Infections

Infections, both maternal and infant, can contribute significantly to infant deaths. Any infection during pregnancy, including dental, genital and urinary tract can be harmful to the fetus. The FIMR data shows that out of the 141 cases reviewed, 65.2% of the mothers had an infection of the reproductive tract (bacterial vaginitis/chorioamnionitis) during pregnancy, 22.0% of the infants had infections, 9.2% of the mothers reported multiple sex partners (multiple partners presents a higher risk for sexually transmitted disease), and 21.3% of the mothers had other infections. In addition, of the 106 preterm birth cases, 63.2% of mothers and 21.7% of infants had infections.

Focus Area 3: Inadequate Nutrition

Research suggests that there is a strong link between preterm labor and inadequate weight gain and inadequate nutrition. Dietary factors such as chronic malnutrition, inadequate vitamins and minerals, and insufficient folic acid are risk factors associated with prematurity and congenital anomaly. The FIMR data show that out of the 141 infant deaths reviewed; 29.1% of mothers were obese, 14.9% of mothers had poor nutrition, 13.5% of mothers had insufficient weight gain and 6.4% of mothers were underweight. In addition, out of the 106 preterm birth cases, 34.9% of the mothers had poor nutrition (were overweight or obese).

Focus Area 4: Smoking

The harmful effects of smoking on the reproductive system have been well researched and documented. The FIMR data show that out of 141 cases reviewed 33.3% (47) of mothers self-reported smoking during their pregnancy and 13.5% of the infants were exposed to secondhand smoke. In addition, out of the 106 preterm births, 30 (41.7%) of the mothers smoked during pregnancy.

Focus Area 5: Positional Asphyxia

Many deaths that in previous years were labeled as Sudden Infant Death Syndrome (SIDS) are now being identified as positional asphyxia or suffocation. There are several practices that increase the risk of positional asphyxia:

- Infants who sleep on their sides or stomachs
- Infants who sleep on adult beds, couches, pillows or other soft bedding
- Infants who sleep with other children, adults or pets
- Infants who are in the care of someone under the influence of drugs and/or alcohol

Positional asphyxia was the second leading cause of infant deaths in Pontiac and Southfield in the years 2000 to 2004. The FIMR data show that out of the 141 infant deaths reviewed, 19.1% (27 cases) were from positional asphyxia. In addition, 17.3% of infants were placed to sleep on soft bedding, 16% were sleeping with others, 16% were sleeping in a non-infant bed, and 10.7% were not placed in the back-to-sleep position.

Strategies to Address the Five Focus Areas of Concern

Please refer to the full report at <http://www.oakgov.com/health/about/infdeath.html> for a list of strategies identified to address each focus area, as well as a list of actions already implemented by the Oakland County Health Division.

Conclusion

Oakland County is fortunate to have members of this community committed to serving the needs of women, infants and families. Their particular interest lies in decreasing infant mortality rates and reducing the infant mortality disparity that has persisted for years in the County between African American and other infants.

The Southfield Community Action Team was formed in response to the FIMR data about infant mortality in this community. The team is comprised of City of Southfield employees, Council representatives, healthcare providers, community agency personnel, OCHD staff, and other committed community members. The committee has focused on prematurity and safe sleep practices. In 2006, this committee

was expanded to include other partners in Royal Oak, Ferndale, Hazel Park, Oak Park, Madison Heights, and Berkley, as well as Southfield.

In the year 2004, the Oakland County Health Division was awarded a three-year grant from the Michigan Department of Community Health (MDCH) entitled Nurse-Family Partnership (NFP). This grant provides funding for home visits by public health nurses to first-time, low-income pregnant women in the City of Pontiac with special focus on African American mothers. One of the primary objectives of the grant is to reduce the incidence of infant mortality and the discrepancies between African American and White infant mortality rates. An NFP Community Advisory Committee is established and is functioning as the Community Action Team for Pontiac. The NFP Community Advisory Committee consists of capable, credible and committed area leaders that are willing to advocate on behalf of the program. During meetings, discussions include strategies for retaining client caseload, reciprocal referral and keeping lines of communication open to better serve the clients. The members support the program and are in a position to significantly affect how it is perceived in the community. Subcommittees are exploring strategies to provide transportation to medical appointments for pregnant women, linking pregnant women to nutrition counseling, and identifying a prenatal risk assessment tool for use by clients and providers in the community.

The Oakland County Health Division will continue to support these community-based initiatives in moving to the next step to develop strategies as identified in this report.

The full report can be viewed and downloaded at <http://www.oakgov.com/health/about/infdeath.html> For additional information, please call (248) 858-1380.