REPORT TO THE TWENTY-NINTH LEGISLATURE
STATE OF HAWAII
2017

PURSUANT TO ACT 203, S.B. 2317, (SLH 2016, §2 at 621-622) REQUIRING THE DEPARTMENT OF HEALTH TO PROVIDE AN ANNUAL REPORT ON CHILD DEATH REVIEW AND MATERNAL MORTALITY REVIEW ACTIVITIES

PREPARED BY
DEPARTMENT OF HEALTH
STATE OF HAWAII
NOVEMBER 2016

Legislative Approval:

In 2016, the legislature passed and Governor Ige signed, Act 203, S.B. 2317 authorizing comprehensive multidisciplinary reviews of child deaths and maternal deaths. The stated purpose of these reviews is to understand risk factors and prevent future child and maternal deaths in Hawaii. An appropriation of $150,000 was made for fiscal year 2016-2017 for the department of health to conduct child death reviews and implement a program for the performance of maternal death reviews.

Child Death Review

Background and Purpose

The death of a child, regardless of cause is always a tragedy. Especially tragic is a child death that could have been prevented. The Hawaii Revised Statues Sections §321-341 through §321-346 was passed assigning the Hawaii State Department of Heath the responsibility of authority to develop and implement a data-driven policy and make recommendations for system changes to reduce preventable child deaths.

A Child Death Review System was developed in 1997. Three (3) reports were produced by the Hawaii State Department of Health covering statistics on deaths from 1996-2006. From 2007 to 2011 child death reviews were held but no further reports were generated.

Act 203, S.B. 2317, approved by the Governor on July 5, 2016, further identified that the Child Death Review System was inactive since 2011 and child death reviews were not being conducted. The Child Death Review, through the Department of Health, Family Health Services Division, Maternal and Child Health Branch, continued until 2013; however, due to limited funding the Child Death Review coordinator position was eliminated and no further reviews were completed until 2016.

Program Activities

The activities listed below were completed in 2016:

1) A Child Death Review Summit was held on June 15, 2016 with the intent of preparing staff and stakeholders for the reinstatement of Child Death Reviews and the establishment of the new Maternal Mortality Review committee. National and local experts provided workshops and informational sessions.
2) In July of 2016, contracted with a Child Death Review registered nurse to organize and coordinate the child death review process. The nurse is the facilitator and lead person to gather, analyze, and prepare child death summaries to be presented to the Child Death Review committee with consultation from the Department of Health, Family Health Services Division medical director.
3) The Hawaii Child Death Review System Policy and Procedure Manual was updated and revised.
4) The Department of Health's Deputy Director of Health Resources Administration, the Family Health Services Division medical director, and Maternal and Child Health

branch chief consulted with a national expert on Child Death Reviews to obtain information on restarting the Hawaii Child Death Review.

5) The Department of Health developed a "Hawaii Department of Health Strategic Plan 2015-2018." Within the plan under the goal of "Healthy Babies and Families," an objective specifically addresses conditions contributing to child death and maternal mortality.

Collaborative Efforts

1) Multiple meetings with the neighbor island registered nurses were held to prepare for the reinstatement of the Child Death Reviews for Maui County, Kauai, and Hawaii Island, Kona and Hilo.
2) Correspondences were sent to the various members of the former Child Death Review members soliciting their participation for the reinstated Child Death Review committee.
3) Consultations were held with national experts to advise the Department of Health of national trends and strategies for implementation of preventative child death activities.
4) Special arrangements were made with the Department of Health's Office of Health Status Monitoring to obtain electronic versions of vital statistics, births, and deaths to be used for the Child Death Review.
5) A report was created "Leading Causes of Infant Death in Hawaii 2009-2015."
6) A meeting was held on November 30, 2016 with the Hawaii State Child Death Review Council to discuss the process for implementing recommendations of Child Death Review committees across all counties.
7) A meeting with child death review team leaders has been scheduled for early December 2016. The objective of this meeting is to foster coordination and collaboration with other child death reviews within the Department of Health, Kapiolani Medical Center and within the Department of Human Services.

Pertinent Data

1) **Total number of child deaths beginning in July 2016** – In the process of arranging for electronic submittals of data between the Office of Health Status Monitoring (vital statistics - death certificates for children) and the Family Health Services Division, Maternal and Child Health Branch.
2) **Number of deaths of children in state custody and the causes of those deaths** – In the process of arranging for electronic submittals of data between the Office of Health Status Monitoring (vital statistics - death certificates for children) and the Family Health Services Division, Maternal and Child Health Branch. Also in the process of developing a procedure to obtain data of children in state custody within the Department of Human Services.
3) **Any child death review activities completed by the department** – Four (4) child death reviews held in August, September, October, and November 2016. Child death reviews are to be scheduled each month. There were seven (7) child deaths reviewed on Oahu from August 2016 through November 2016. Training and

coordination in preparation of the startup of the County (Kauai, Hawaii, Maui) reviews are also in process, with the first child death review, scheduled for December 2016 on the island of Hawaii, Hilo.

4) **Trends in child deaths** – Bed sharing of infants with other family members in the same bed was a common factor for the last three infant deaths that were reviewed. The Department of Health, Family Health Services Division, Maternal and Child Health Branch is partnering with the Safe Sleep Hawaii Coalition to collaboratively develop preventative strategies on best practices for safe and healthy sleep recommendations to be distributed to parents, health providers, and public health agencies.

5) **Recommendations for system changes including any proposed legislation:** As the program is just beginning to reorganize and conduct reviews, there are no recommendations for system changes or proposed legislation at this time. The Department of Health, Family Health Services Division, Maternal and Child Health Branch submitted a budget request for continued general funds to pay for the registered nurse and abstractor needed for the Child Death Review and Maternal Mortality Review.

Staff Training

The contracted registered nurse and Maternal and Child Health Branch staff were provided with an orientation, training on child death reviews through national and local experts and observed mock reviews.

Maternal Mortality Review

Background and Purpose:

Although maternal mortality is a relatively rare event in Hawaii, each year women die of pregnancy-related complications. These deaths are devastating for families and communities. According to the Centers for Disease Control and Prevention (CDC), about half of maternal deaths are believed to be preventable. The purpose of the maternal mortality review (MMR)process is to determine the causes of maternal mortality in Hawaii and identify public health and clinical interventions to improve systems of care and prevent maternal deaths.

Program Activities:

Activities pursuant to the implementation of a program for the performance of maternal mortality reviews have included Department of Health staff training; development of policies and procedures for the maternal mortality review committee; collaboration with national and state organizations; and a half-day introductory training for members of the maternal mortality review committee.

Staff Training

Family Health Services Division staff attended maternal mortality review trainings at the 2016 CityMatCH Leadership and Maternal and Child Health Epidemiology Conference. Trainings by CDC and the Association of Maternal and Child Health Programs (AMCHP)

included an overview of national and state-level efforts and best-practices for maternal mortality reviews. Other trainings attended include an introductory training on the CDC's Maternal Mortality Review Information App (MMRIA) which is the data collection and reporting system that will be used by the Hawaii review.

Policies and Procedures

A draft of policies and procedures for the Hawaii maternal mortality review (MMR) committee was developed. Policies were reviewed from a number of states with active MMR programs and adapted in order to create a comprehensive and functional set of procedures. The policies and procedures delineate the operational aspects of the MMR and include sections on the review process, committee member responsibilities, and confidentiality, as well as other procedural aspects. The draft version has been distributed for committee member input and will be finalized in early 2017 prior to commencement of case reviews.

Collaborative Efforts

The Department of Health has worked closely with the CDC Division of Reproductive Health during the implementation phase of the maternal mortality review. The CDC has been a strong supporter of the development of state-based maternal mortality review programs since 2001. Utilization of CDC expertise and supported resources, such as the MMRIA data system, has enabled the Hawaii MMR program to proceed quickly and effectively through the implementation process. The University of Hawaii, The American Congress of Obstetricians and Gynecologists (ACOG), Hawaii Maternal and Infant Health Collaborative, Healthcare Association of Hawaii and the Kapiolani Medical Center has partnered with the Department of Health to assist as team members on MMR planning and reviews.

Introductory MMR Member Training

An introductory training session was held in November 2016 for members of the Hawaii MMR Committee. The training was facilitated by the faculty of the Hawaii John A. Burns School of Medicine and the CDC Division of Reproductive Health. The half-day training was attended by approximately 50 potential members from diverse disciplines including physicians, midwives, nurses, public health, community not-for-profits, healthcare associations, medical examiner's office, and social services. The training provided members with an overview of maternal mortality review, committee process implementation, case identification, and a facilitated mock case review.

Next Steps

In the upcoming year, the Department will be finalizing the policies and procedures, appointing the membership of the MMR committee, convening the MMR committee and commencing review of Hawaii maternal deaths.

Additional Information

In finalizing the MMR policies and procedures the Department of Health will be looking at a broader identification of potential maternal deaths by conducting review of vital statistics,

autopsy, and other available records for cases that may potentially be pregnancy-related or pregnancy associated. This will include looking at the standard World Health Organization (WHO) maternal definition, records identified through active surveillance for birth records among women of reproductive age, and review of death certificate records where a check box identifying the women as having a pregnancy in the past year 2015.

The work of the MMR committee will include an assessment of these cases with determination not only of preventability, but also will be classified into pregnancy-associated and pregnancy-related types of deaths. Pregnancy-associated death is defined by CDC as "The death of a woman from any cause during pregnancy or within one year of the end of pregnancy that is associated, but not related." It would include causes such as suicide, traffic accidents, and other causes of death. The pregnancy-related death is defined by CDC as "The death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiological effects of pregnancy."

This definition of pregnancy-related is more in line with the standard WHO maternal mortality classification and would include acute causes such as amniotic fluid embolism as well as other longer term causes, such as heart failure secondary to cardiomyopathy. The inclusion of both the pregnancy-associated and pregnancy-related causes of maternal death will lead to a higher overall rate than reported based on the standard WHO maternal death definition.

Based on preliminary data received so far a total of 5, 9, and, 11 cases have been identified by vital statistics in 2013, 2014, and 2015 respectively, for potential review by the MMR team.

In 2015 provisional data, there were 41 child deaths (1-17 years of age) identified to Hawaii residents. Of these transport related (n=8) was most common, followed by suicide (n=6), and infections (n=6). These are based on the National Center for Health Statistics standards for leading cause of death classifications. This pattern is similar to that seen in recent years and no significant changes to previous years.

The leading causes of child (age 1-17) death in the 2009-2015 aggregated data are: 1) Transport related (16.5% of all child deaths); 2) Malignant neoplasm (13.8%); 3) Suicide (10.8%); and 4) Drowning (9.3%).