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KE KIA'ĀINA O KA MOKU'ĀINA 'O HAWAI'I

DEPT. COMM. NO. 994

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In reply, please refer to:
File:

December 29, 2023

The Honorable Ronald D. Kouchi,
President and Members of the Senate
Thirty-second State Legislature
State Capitol, Room 409
Honolulu, HI 96813

The Honorable Scott K. Saiki, Speaker
And Members of the House of
Representatives
Thirty-second State Legislature
State Capitol, Room 431
Honolulu, HI 96813

Aloha President Kouchi, Speaker Saiki, and Members of the Legislature:

For your information, I am transmitting a copy of the following report.

Annual Report on Child Death Review and Maternal Mortality Review Activities, 2023

Pursuant to section 93-16, Hawaii Revised Statutes, this report may be viewed online at:

https://health.hawaii.gov/opppd/department-of-health-reports-to-2024-legislature/

Sincerely,

Kenneth S. Fink, MD, MGA, MPH
Director of Health

Enclosures
C: Legislative Reference Bureau
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REPORT TO THE THIRTY-THIRD LEGISLATURE

STATE OF HAWAIʻI

2024

PURSUANT TO ACT 203, S.B. 2317, (SLH 2016 § AT 621-622)

REQUIRING THE DEPARTMENT OF HEALTH TO PROVIDE AN ANNUAL REPORT ON CHILD DEATH REVIEW AND MATERNAL MORTALITY REVIEW ACTIVITIES

PREPARED BY:

STATE OF HAWAIʻI
DEPARTMENT OF HEALTH
HEALTH RESOURCES ADMINISTRATION
FAMILY HEALTH SERVICES DIVISION
MATERNAL AND CHILD HEALTH BRANCH

December 2023

2024 REPORT TO THE HAWAIʻI STATE LEGISLATURE

SUMMARY

Every year in the United States, almost 37,000 children die before their 18th birthday. The death of a single child is a profound loss to a family and community, bringing unjust suffering and the pain of unfulfilled promises. Understandably, when a community is affected by a child's death, it wants answers and a deep understanding of how and why the child died. These answers can help communities better understand underlying risk factors and inequities they may not identify otherwise (Source: CDR National Center for Fatality Review & Prevention, 2020).

The information within this report emphasizes the importance of continued Hawaiʻi fatality reviews of child and maternal deaths to reduce and limit future deaths. The identification of prevention interventions and strategies greatly assists and supports the medical and public health communities in providing critical information to sustain healthy and safe environments for the residents and visitors of Hawaiʻi.

These fatality reviews assist in identifying trends and patterns, valued cultural practices, what is working within the service and support system, failure or needed oversight in care, properly classifying causes of death, and needed system improvements, including the need to change, approve, or modify existing laws. There is also great emphasis placed on continuing positive preventive interaction between public health agencies that work together with health care providers, communities, and other interested public and private agencies.

Recommendations included in this report address a broad spectrum of needs and opportunities. Our findings point to two key areas of focus: improving behavioral health care and ensuring that all our recommendations specifically benefit Native Hawaiians and Pacific Islanders (NHPI) communities. Focusing efforts on these two areas will significantly improve child health and perinatal care in Hawaiʻi state and reduce child and maternal mortality.

The work represented in this report is done to prevent deaths, reduce disparities in health outcomes, and improve the lives of all pregnant people, children, and families throughout Hawaiʻi. The child and maternal mortality reviews would not be possible without the Child and Maternal Mortality Review Panel members, who volunteer their time and expertise to improve children and perinatal health care in Hawaiʻi state.

In Hawaiʻi, disparities are often characterized by race/ethnicity and geography. The goals and strategies identified in the Community Health Plan are rooted in the idea that prevention is foundational to population health. Successful approaches to ensure healthy and safe environments also need to include preventive strategies of health risk factors to move towards sustaining thriving communities for the residents and visitors of Hawaiʻi.

In addition to the preventive work of many Hawaiʻi public and private professionals to preserve life and greatly reduce and limit preventable child and maternal deaths, the Centers for Disease Control and Prevention (CDC) has been instrumental in conducting scientific research to assist in the dissemination of improved information on medical and public health practices necessary to promote healthy and safe lifestyles for families, women, and children.

CHILD DEATH REVIEW

A. Overview of the Child Death Review Process

The Child Death Review (CDR) is a multidisciplinary and multiagency review of individual child deaths intended to help communities understand why children die and to equip families and stakeholders with effective preventable resources and supports to reduce future fatalities.

There are more than 1,350 CDR teams in all 50 states, the District of Columbia, Guam, and within some Tribes. Though they sometimes go by different names, have different case definitions, or operate out of different agencies, these programs share their commitment to learning from the tragedies they face and helping protect children in the future.

The following bulleted points below further describe the child death review process:

- Goals and objectives of the child death review committee meetings strive to reduce preventable child deaths through systematic, multidisciplinary, and interagency review of all child deaths, from birth to under age 18, in the State of Hawai‘i.
- Hawai‘i Child Death Review System Objectives developed with DOH and their many partners will continue to maintain a State Collaborative Review where multiple fatality review coordinators meet. During 2023, the review was placed on hold due to numerous significant staff vacancies, which was addressed, and the State Collaborative Review will resume in 2024. While the group did not meet, many recommendations statewide were implemented throughout the year, referring to activities for 2023.
- Local Child Death Review Teams (Honolulu County, Kauai County, Hawai‘i County, and Maui County).
- Describe issues, trends, and patterns of child death in Hawai‘i.
- Analyze the causes and circumstances surrounding child deaths.
- Recommend the development of policies, strategies, and resources to prevent future child deaths based on risk factors.
- Coordinate training sessions to reduce preventable child deaths by increasing awareness of preventable child death strategies.
- Promote community prevention education activities through collaborative partnerships to prevent child deaths.
- Infant reviews include deaths by:
    i. Homicide;
    ii. Accident;
    iii. Natural deaths - those attributed to disease-process-related causes, such as congenital anomalies, genetic disorders, cancers, serious infections, sudden infant death syndrome (SIDS), sudden unexpected infant death (SUIDS), pneumonia, and respiratory failure;
    iv. Undetermined is intended for cases that are difficult to establish with reasonable medical certainty, the circumstances of death after thorough examination; and
    v. Unintentional Injury is precipitated by events such as motor vehicle crashes, falls, poisonings, drowning, fires, burns, suffocation, choking, strangulation, electrocutions, agricultural injuries, accidental firearms use, and other accidents. These events take place without any intention to cause harm.

History of the Child Death Review with Legislative Supports

1) The Legislature passed Senate Bill (S.B.) 1589, CD I, which became Act 369 upon the Governor's approval on July 3, 1997. Act 369 was codified into Sections §321-341 through §321-346, Hawai‘i Revised Statues.
2) In 2016, the Legislature passed Act 203, S.B. 2317, authorizing comprehensive multidisciplinary reviews of child deaths and adding the review of maternal deaths with the submission of an annual report to the Legislature. These reviews aim to understand risk factors and prevent future child and maternal deaths in Hawai‘i.
3) HRS §321-343 also provides access to information from all healthcare providers, social services, and state and county agencies for use in child death reviews upon written request from the Director of Health. HRS §321-346 provides for immunity from liability states that all agencies and individuals participating in the review of child deaths shall not be held civilly or criminally liable for providing the information required under this part.
4) The 1997 legislation assigned the responsibility for Child Death Review to the Hawai‘i State Department of Health (DOH). This provided the DOH authority to develop and implement a data-driven policy and recommend system changes to reduce preventable child deaths. HRS §321-341 designates the DOH Family Health Services Division, Maternal and Child Health Branch to implement these multidisciplinary and multiagency reviews of child deaths.
5) The DOH Family Health Services Division (FHSD) is committed to continuously improving the availability of and access to preventive and protective health services for individuals and families by providing leadership in collaboration with communities and public-private partners. These services are carried out by the administrative staff of the Division office and through its three branches and programs: Children with Special Health Needs (CSHN); Women, Infants, and Children (WIC); and Maternal and Child Health Branch (MCHB).
6) A core aspect of MCHB is the administration of services to reduce health disparities for women, children, and families in Hawai‘i. One key element of administering prevention-based public health services directed by MCHB is through three fatality reviews: child death, maternal mortality, and domestic violence. The Division's three branches collaborate, sharing information to assist in identifying critical facts to prevent and reduce future similar deaths.

B. Child Death Review Summary

1) Child death reviews provide essential information needed to identify strategies to improve child health and safety. The goal is to understand the causes, circumstances, and incidences of these deaths in Hawai‘i and identify objectives, recommendations, and outcomes to reduce the number of preventable child deaths. Information is then shared with the public.

2) Child Death Reviews enable states and communities to generate that deep understanding, identify underlying risk and protective factors, and create meaningful change and safer, more equitable communities.

3) The child death categories selected for review in Hawai‘i have been defined by the National Center for Fatality Review and Prevention and supported by the U.S. Department of Health and Human Services, Health Resources and Administration, Maternal and Child Health Bureau to include child abuse and neglect, homicide, suicide, undetermined, natural, and unintentional injury.

4) Child death reviews in Hawai‘i are reviewed one year after the death occurs, and public and private members of the community examine the circumstances surrounding a child’s death.

5) Interagency collaboration assists team members in understanding why children die and promotes the development of interventions to protect other children and prevent future deaths.

6) Data is then analyzed, and recommendations are made to assess which deaths may be preventable.

7) Public and private agencies meet to ensure prevention strategies and recommendations are available for families, parents, and the entire community.

8) The National Center for Fatality Review and Prevention, funded in part by a Cooperative Agreement from the U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau and provides continued support to Hawai‘i in the following areas:
    a. Ensures consistent reporting of the cause and manner of death within the National Fatality Review Case Reporting System that is available to the Hawai‘i Child Death Review team.
    b. Encourages the improvement of communication and linkages among local and state agencies, enhancing the coordination of efforts.
    c. Provides webinars, training, data support, and resource development to Hawai‘i.

C. Federal Funds for Child Death Review Support through the DOH FHSD/ MCHB

1) Within MCHB, program areas develop continued strategies with public and private partners to assist in limiting and reducing preventable child deaths. These program areas promote healthy lifestyles for children using federal and state funds, including:
    a. Community-Based Child Abuse Prevention (federal grant) – focuses on prevention programs and activities designed to strengthen and support families to prevent child abuse and neglect.
    b. MCHB Domestic Violence Sexual Assault Special Fund – uses a public health approach to incorporate the special funds, implementing strategies and activities to prevent, reduce, and eliminate sexual violence and domestic intimate partner violence.
    c. Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) (federal grant) – voluntary, evidence-based home visiting service for at-risk pregnant women and families with children through kindergarten entry. MIECHV provides:
        i. Home-visiting professionals who are paired with families who have limited supports and resources.
        ii. Promotion of positive birth outcomes for pregnant women with referrals for other needed services.
        iii. Parenting education on child development, maternal and child health, and preparing children for school readiness.
        iv. Services that are also available for homeless/homeless families.

2) Personal Responsibility Education Program (federal grant) – supports organizations and communities to reduce the risk of youth homelessness, adolescent pregnancy, and domestic violence.

3) Rape Prevention and Education Program (federal grant) – guides the implementation of sexual violence prevention efforts, which includes stopping sexual violence before it begins; reducing risk factors; and using the best available evidence when planning, implementing, and evaluating prevention programs.

4) MCHB also utilizes funds through FHSD's Title V Maternal and Child Health (MCH) Block Grant, authorized in 1935 as part of the Social Security Act. Title V's mission is to improve the health and well-being of the nation's mothers, infants, children, and youth, including children and youth with special healthcare needs and their families. The program is funded through the Health Resources and Services Administration's Maternal and Child Health Bureau and administered by FHSD.

5) Contracts with statewide providers in Hawai'i to provide Family Planning Services and Reproductive Health supports to the underinsured and uninsured while working in partnership with private and public agencies such as Essential Access Health, administrator of Title X services, healthcare agencies, and the Hawai'i State Department of Human Services.

Pertinent Data

1) **Total number of child deaths** for 2022 was 155. There were 62 non-natural deaths and 93 natural deaths.

a. Cause of death for non-natural deaths: accidents (27); suicide (10); homicide (2); undetermined cases (16) that are difficult to establish with reasonable medical certainty; drowning; falls; unintentional asphyxia; assault with a weapon; poisoning; overdose; and acute intoxication; and pending (7) manner of death that are pending**.**
b. Natural deaths are those attributed to disease process-related causes, such as congenital anomalies, genetic disorders, cancers, serious infections, Sudden Infant Death Syndrome, Sudden Unexpected Infant Death, pneumonia, and respiratory failure.

2) Number of children deaths in state custody (Department of Human Services, Social Services Division, Child Welfare Services) for 2022.

a. There was 1 (one) child fatality in state custody determined to be due to maltreatment. Autopsy determined the cause of death to be undetermined, sudden, unexplained death in infancy.

3) Trends – Data gathered through DOH Vital Records

a. More than half of the non-natural child death cases were in Honolulu – 45
    i. Hawai'i County – 12
    ii. Maui County – 3
    iii. Kauai County – 2
b. For most of the non-natural causes of death for children in Honolulu, the death manner was an accident (16), suicide (8), homicide (2), and undetermined (13), pending with not enough information to make a determination (6).
c. There were ten (10) suicide cases, eight (8) in Honolulu and two (2) in Maui. All ten (10) children were in the 11-17 age group.

d. Out of twenty-four (24) non-natural infant deaths, five (5) were accident, fourteen (14) was undermined death, and five (5) had pending death manner.

6) Recommendations for System Changes
    a. Continue to develop partnerships with health and youth service providers to promote adolescent health and annual wellness visits for youth ages 12- 17.
    b. Continue to increase prevention strategies for promoting child and adolescent wellness, including developing mobile-responsive social media and other online content for parents and adolescents.
    c. Continue to provide opportunities for youth to be a part of decision-making for suicide and motor vehicle preventive strategies.
    d. Continue collaborating with public and private agencies to ensure the services provided are accessible, culturally appropriate, and responsive to the community's needs.

7) Proposed Legislative
    a. The Child Death Review team will continue to work on advocating for identifying specific actions required to create a Fetal and Infant Mortality Review (FIMR) for Hawai‘i.
        i. Differences in child death and fetal death reviews are that fetal reviews include family member interviews and abstraction of deaths by clinicians. There is also more of an emphasis on prematurity factors.
        ii. The Honolulu Child Death Review team recommends amending the current Hawai‘i Revised Statues, Title 19 Health 321-341 Child Death Review Statue, which currently addresses deaths of prematurely born infants as young as 24 weeks gestation, to now include all fetal deaths over 20 weeks of gestation.
        iii. Implementation of the FIMR pilot project in collaboration with Kapiolani Medical Center (KMC) for Women and Children to support prevention activities to reduce and limit the amount of premature, fetal, and infant stillborn rates.
        iv. KMC is considered the birth facility that offers the most comprehensive maternity and newborn care in the Pacific Region and the only hospital in the state with physicians (neonatologists) specializing in newborn care on-site 24 hours a day. It is important to note that since Kapiolani provides the highest level of care for newborns, many Hawai‘i hospitals and physicians count on Kapiolani when babies require more intensive care, transferring more than 250 babies to Kapiolani every year.

D. Prevention Program Activities

1) DOH continues to launch media campaigns on Safe Sleep and Sudden Infant Death Syndrome (SIDS) to educate parents and caregivers on how to keep infants safe while sleeping. The hope is to increase awareness of safe sleep practices with clear and practical steps for parents, families, and caregivers. The DOH's last Safe Sleep media campaign, in collaboration with other public and private partners, was held in October 2023.

   Other efforts by the DOH include offering parents and caregivers education on the importance of ensuring infants have their own beds to reduce risks of sudden infant death syndrome (SIDS).

The DOH distributed cribs to families, encouraging safe sleep practices and coordinating with neighbor island partners and organizations to provide safe sleep education and promote safe sleep in Kauai, Maui, and Hawai‘i counties.

The DOH coordinated with the Department of Human Services Resource Caregiver programs to provide portable Pack 'n Plays as appropriate and translated educational materials into at least one of the following languages: Ilocano, Chuukese, Samoan, Marshallese, Tagalog, Spanish, Korean, Japanese, Chinese, or Vietnamese.

2) DOH continues to offer forums for members of public and private fatality reviews. Collaborative Fatality Review team members have agreed with community recommendations to conduct death and birth certificate training by physicians for physicians. A death certificate training was held in 2022 with the DOH Vital Records representatives, City and County medical examiners, and other pathologists. The video training will be available to other physicians on the DOH website in 2024.

3) The DOH continues to contract with local television and radio stations to utilize media for public service announcements on safe sleep education and the importance of prenatal care before birth and during pregnancy to target women and mothers ages 18-40 years of age. The DOH's Media initiatives also emphasize perinatal care during pregnancy, labor, delivery postpartum, and neonatal periods.

   In 2023, the Governor issued a proclamation declaring October Infant Safe Sleep Month, in conjunction with the national observance of Safe Sleep and Sudden Infant Death Syndrome (SIDS) Awareness Month, to remind parents and caregivers that sleep-related deaths are often preventable. In recognition of this, the Hawai‘i State Department of Health (DOH) launched the Safe Sleep Hawai‘i webpage with information, resources, and referrals to help parents and caregivers create a safe sleeping environment for their babies.

4) The DOH also continues to contract with the Child & Family Service to administer the "Parent Line," a DOH/MCHB-funded program that is a resource on child behavior, child development, parenting, caregiver support, and other community resources.

5) Coordination of domestic violence and rape prevention workshops and seminars for families and public and private agencies.

E. Child Death Review Implementation of Recommended Activities (January 2023 – December 2023)

Honolulu County

1) The DOH Child Death Review registered nurse Coordinator collaborated with Kauai and Hawai‘i Island nurses to conduct the Child Death Review in each county (October 2023 on Hawai‘i Island and November 2023 on Kauai).

2) Recommendations were provided on the importance of incorporating more equity, diversity, and inclusion activities from a cultural viewpoint with stakeholders from the John A. Burns School of Medicine, and emphasis was placed on the health outcomes of Native Hawaiians and Pacific Islanders**,** with plans for a 2024 Conference.

3) Continued working with an OBGYN from the Hawai‘i Children’s Hospital, Kapiolani Medical Center for Women and Children to embark on the FIMR pilot project where more comprehensive infant reviews are discussed with other physicians and other medical professionals.

4) Continued with the implementation of the Child Death Review recommendations of addressing drowning, motor vehicle accidents, and suicide prevention measures, supports, and strategies with private and public agencies, such as Kapiolani Medical Hospital, Emergency Medical Services, Fire Department, Public Health Nurses, Military, and Department of Education administrators.

5) Sponsored the Keiki O Ka ‘Aina (KOKA) Conference with focus on educating children, strengthening families, enriching communities, and perpetuating culture. In 2023, KOKA re-established an important program in the Oahu Prisons to offer mentorship to Native Hawaiian young fathers, preparing them for successful fatherhood when they are released. Also, KOKA is offering the Mea Kanu farming program to school groups and launching a Preschool Teacher Apprenticeship program to train young teachers who want to work in early learning.

Maui County (Maui, Lanai, Molokai)

1) Provided concrete support for families with children, especially in the rural and insular areas of Maui County, on parenting, coaching, and mentoring; and assisted families in navigating the system of care.

2) Facilitated the Ho’oikaika Partnership Strategic Plan 2020-2025 to create a seamless safety net of services to support children and their caregivers, strengthening the prevention and provider workforce and advocating for policy, program, and systems changes to prevent child abuse and neglect.

3) Contracted the System of Services Coordination for children, families, and their providers in Maui County.

4) Purchased medical equipment for a mobile clinic relocated to Maui from Oahu to help families affected by the August 8, 2023, Maui wildfires and sponsored the Lahaina Health Fair with focus on Maui Wildfire & Resilience Resource Guide to support those affected by the wildfires.

5) Purchased cash vouchers to help families affected by Maui wildfires pay for basic emergency supplies such as food, first aid kits, and school supplies for children.

Hawai‘i County

1) The registered nurse hired by the DOH to assist in conducting the Child Death Reviews in Hawai‘i County conducted the Hawai‘i Island CDR in October 2023, with plans for the second Hawai‘i Island CDR in December 2023.

2) Working on Perinatal Health Consortia Project to facilitate a workgroup focusing on improving birth outcomes and other measures surrounding perinatal, postpartum, and inter-conceptional health of women residing in Hawai‘i County.

3) Working on breastfeeding Promotion Project to promote and support extended and exclusive breastfeeding that builds upon cultural strengths and acknowledges traditional practices.

4) Working on a Child Injury Prevention Initiatives Project to disseminate evidence-based health information and incentives to reduce unintentional nonfatal/fatal injuries in children.

5) Car seat inspection events were held to disseminate information on safe and appropriate usage of car seats for children. Working on recruiting and providing certification for more car seat safety inspectors on Hawai‘i Island.

Kauai County

1) The DOH registered nurse conducted the Kauai Child Death Review in November 2023 to review cases of infants who died due to unsafe sleep environments.

2) The Kauai team continued to implement CDR recommendations for drowning, safe sleep, teen suicide prevention, and driving under the influence, car seat safety, including hosting a training session to train 10 new car technicians purchasing cribs and car seats for low-income families.

3) Purchased health and educational supplies for Children and Youth and supplies for pregnant women, newborns, and young children residing in Kauai.

4) Continued the contract with the Kauai Planning and Action Alliance for a Kauai community health worker coordinator and a Kauai migrant community health worker specifically serving Pacific Islanders.

5) Continued promoting the Kauai Family Resource Kiosk at Kukui Grove Center with health care information, prevention activities, and resources.

F. Collaborative Efforts

MCHB works in collaboration with community agencies (public and private) to assist in providing prevention strategies to reduce child deaths.

The DOH continues to support the Hawai‘i Maternal & Infant Health Collaborative, a public-private agency and influential group that assists in improving maternal and infant health outcomes by enhancing systems and supports for families in Hawai‘i. Specific workgroups with community members emphasize prevention activities to reduce and limit preterm babies' deaths.

These collaborative efforts enable states and communities to understand deeply, identify underlying risk and protective factors, and create meaningful change and safer, more equitable communities.

G. State Collaboration

1) The Maternal and Child Health Branch continued discussions with public and private agencies to provide a wide array of services, education, and supports to the many communities within Hawai‘i. Some of the topics included strategic and action planning for domestic violence, child abuse and neglect prevention, family planning services, adolescent health services, home visiting services, fatality review prevention, and rape prevention education.

2) Collaborative Fatality Review meetings continue to be facilitated by the FHSD/MCHB with public and private agencies to discuss system supports for fatality reviews and strategies to reduce and limit preventable deaths in Hawai‘i. Some topic areas discussed are:
    a. Identification of training/educational messages tailored to specific communities
    b. More media campaigns with prevention methods promoting adolescent wellness and prevention of teen suicides
    c. Supporting existing relationships with agencies that provide information to fatality reviews (e.g., medical examiners, vital records, medical, public, and private agencies)
    d. Establishing new relationships within the community to support prevention recommendation implementation for the public

H. National Collaboration

1) Continued consultation with the National Center for Fatality Review and Prevention for technical support and use of the Case Reporting System.

2) In September 2023, the DOH sponsored staff, families, providers, and other stakeholders to attend the annual City Match conference in New Orleans, Louisiana. The theme of the City Match Conference was reconnecting and transforming Maternal and Child Health, a journey of healing, rebirth, and growth. The conference sessions focused on protecting and advancing maternal and child health by examining policies and contexts in which people live, work, and play, focusing on promoting innovative and impactful ways to impact health, rights, and justice in their communities.

3) The DOH Women’s Infants and Children (WIC) Supplemental Nutrition Program participated in the Food and Nutrition Service Western Regional Office review to evaluate the operations and performance of the Hawai‘i WIC nutrition service policies, regulatory requirements, quality standards, and monitoring activities. Information gathered through the evaluation process included staff interviews, documentation reviews, and case file reviews.

MATERNAL MORTALITY REVIEW

The Department of Health (DOH) Family Health Services Division, Maternal and Child Health Branch, provides an annual report on the Hawai‘i Maternal Mortality Review activities, which includes trends and recommendations for system changes and any proposed legislation.

As the Centers for Disease Control and Prevention (CDC) describes, positive pregnancy outcomes define healthy pregnancies that begin with planning before, during, and after the baby arrives.

In Hawai‘i, healthcare providers are instrumental in helping women prepare for pregnancy and for any potential problems that may arise during pregnancy. Early initiation of prenatal care by pregnant women and continuous monitoring of pregnancy by health providers are important in helping to prevent and treat severe pregnancy-related complications.

Background and Purpose

Maternal mortality rates in the United States are higher than in many other developed countries, and social factors may contribute to this difference. In Hawai‘i, approximately 10 to 12 women across the state die each year because of pregnancy or pregnancy-related complications. More than half of those deaths were deemed preventable. However, maternal morbidity and mortality do not affect all mothers equally.

The Centers for Disease Control and Prevention (CDC) within the Morbidity and Mortality Weekly Report noted that from 2018 to 2021, the maternal death rate in the United States increased from 17.4 to 32.9 per 100,000 live births, Native Hawaiian and other Pacific Islander, Black, and American Indian and Alaska Native persons have the highest rates of pregnancy-related deaths. Approximately 80% of pregnancy-related deaths are preventable. Preventing pregnancy-related deaths requires a multilevel approach that includes ensuring quality care for all pregnant and postpartum persons.

Native Hawaiian and Pacific Islander women experience maternal deaths at a higher rate, even though they make up a smaller proportion of women in the state, showing the persistent ethnic disparities. Moreover, combined data from the MMRIA system (Maternal Mortality Review Information Application-CDC) show that mental health disorders and substance use played an important role in maternal mortality in Hawai‘i.

Standardized data collection is the first step toward fully understanding the causes of maternal mortality and eliminating preventable pregnancy-related deaths. The Hawai‘i Maternal Mortality Review Committee (HMMRC) was established in 2016 and held its first review of maternal deaths in 2017. The purpose of the Hawai‘i Maternal Mortality Review is to determine the causes of maternal mortality and identify public health and clinical interventions to improve systems of care and prevent future maternal deaths.

Maternal Mortality Review Process

The Hawai‘i Maternal Mortality Review Committee reviews all maternal deaths in Hawai‘i. The process for a maternal mortality review is as follows:

1) The DOH Maternal and Child Health Branch (MCHB) research statistician collaborates with the DOH Vital Records Office to gather information on maternal deaths.

2) The DOH Maternal and Child Health Branch (MCHB) staff representatives request medical records. These requests are made to any facility or agency determined to have provided care to the individual to facilitate the collection of pertinent information necessary for each case review, focusing on connecting the relevant aspects of the decedent's life and subsequent death.

3) The DOH registered nurse (RN) abstractor reviews the available medical and other specialty reports to create case summaries discussed during the committee reviews.

4) Once the abstraction is completed, the abstractor will de-identify the case(s) in preparation for review. The multiagency and multidisciplinary team reviews the case summaries. Although de-identified data is utilized, all Hawai‘i Maternal Mortality Committee HMMRC members sign the confidentiality agreement, which states that review material and proceedings of review meetings are privileged information for use only by committee members and program staff.

5) A determination is made as to whether the death is pregnancy-related or pregnancy-associated.
   a. Pregnancy-related deaths are those that result from complications of pregnancy, the chain of events initiated by the pregnancy, or the aggravation of an unrelated condition by the pregnancy.
   b. Pregnancy-associated deaths of a woman are from any cause while she is pregnant or within one year of termination of pregnancy.
6) Following the review of each maternal death, recommendations are made by the HMMRC to create plans of action that address prevention strategies for pregnant women to limit and reduce future deaths. The committee members have access to de-identified clinical and non-clinical information, including medical records, social service records, and vital records to fully understand the drivers of maternal mortality, complications of pregnancy, and associated disparities. All this information serves as a foundation for developing impactful, targeted interventions.
7) After the HMMRC makes its decisions and recommendations, the information is entered into the Maternal Mortality Review Information Application (MMRIA) database. MMRIA is a Centers for Disease Control and Prevention (CDC) confidential data system available to individual state MMRCs for comprehensive case abstraction and data aggregation.

The CDC collected data to support that over 700 women die from pregnancy-related complications each year in the United States. In Hawai‘i, 80% of pregnancy-related deaths were found to be preventable. Moreover, mental health conditions are one of the leading causes of pregnancy-related death. In addition, while a mental health condition (including substance use disorder) may not have caused the death, it may have contributed to the death. The association between illness and mortality is complicated because mental illness does not directly kill women; it serves as an underlying factor that may result in suicide, accidental death, and death due to accidental drug intoxication or homicide.

During the COVID-19 pandemic 2020-mid-2023, the CDC continued to advise that pregnant people are at an increased risk for severe illness from COVID-19 as compared to non-pregnant people. The World Health Organization also recommended robust surveillance and testing of pregnant women to ensure their well-being and to take the same precautions as others to avoid COVID-19 infection.

The increased focus on maternal mortality during the pandemic and post-pandemic has exacerbated the need for continuous collaboration between Hawai‘i public health agencies and medical healthcare organizations, as these groups have mostly worked independently, which impedes standardized data collection and information-sharing between committees.

Program Activities

The activities below were completed in 2023:

1) Continued to follow the national and local recommendations from the Centers for Disease Control and Prevention and the Hawai‘i State Department of Health (DOH) on the guidelines for COVID-19 prevention and other related health information.

   According to the CDC systematic review process, it was identified that COVID-19 can have certain effects on pregnancy outcomes as pregnant women are more likely to experience complications. For example, COVID-19 during pregnancy increases the risk of delivering a preterm (earlier than 37 weeks) or stillborn infant.

2) There were two Hawai‘i Maternal Mortality Review Committee (HMMRC) meetings in August and December to review 2020 and 2021 maternal deaths. Also, it was discussed whether prevention strategies were based on the findings. Fatality review meetings were held in person and via teleconferencing utilizing a secure virtual platform.

3) The DOH/MCHB applied in May 2023 for the Centers for Disease Control and Prevention grant funding opportunity “Preventing Maternal Deaths; Hawai‘i Maternal Mortality Review” to improve data quality by identifying and characterizing pregnancy-related deaths that also address health inequities. The DOH was awarded the grant funding on August 14, 2023, and the grant period is from September 30, 2023, through September 29, 2024, with other opportunities to apply for the CDC's five-year grant addressing maternal health.

   This funding will support agencies and organizations that coordinate and manage the Hawai‘i Maternal Mortality Reviews and allow for funding to address prevention opportunities.

   The Hawai‘i Maternal Mortality Review Committee will identify pregnancy-associated deaths within one year of death, abstract information by entering data into the Maternal Mortality Review Information Application (MMRIA), conduct multidisciplinary reviews, and enter committee decisions within the CDC data system. CDC will work with the DOH to improve data quality, completeness, and timeliness. The DOH, with the CDC, will analyze strategies to reduce maternal deaths.

4) The Family Health Services Division (FHSD) continues to administer the Pregnancy Risk Assessment Monitoring System (PRAMS) funded by the CDC, which is a population-based surveillance system that identifies and monitors maternal experiences, attitudes, and behaviors from preconception through pregnancy and into the inter-conception period. Professionals and public/private agencies utilize data reviewed from the Hawai‘i PRAMS to plan for future interventions promoting healthy outcomes for the women and children of Hawai‘i.

5) FHSD/MCHB continued to work with the public health community organization, Hawai‘i Children's Action Network, to coordinate trainings and build workforce capacity for individuals/agencies that provide services to expectant and new moms. Primary stakeholders include physicians, healthcare providers, and other non-clinical staff.

6) In November 2021, the CDC released a national call for Maternal Mortality Review Information Application (MMRIA) data for aggregate analyses, compiling data from all jurisdictions using MMRIA. This was the CDC's first national call for MMRIA data since the start of the Enhancing Reviews and Surveillance to Eliminate Maternal Mortality (ERASE MM) in 2019. MCHB signed a Data Sharing agreement with the CDC to allow for sharing of HMMR Committee data collected in the CDC's (MMRIA). The CDC utilizes this data to improve data quality, identify technical assistance needs, and perform detailed analyses across MMRIA users regarding maternal deaths.

7) FHSD/MCHB collaborates with the Maternal Health & Perinatal Care Workgroup and the Peri/Inter Conception Work Group of the Hawai‘i Maternal and Infant Health Collaborative (HMIHC). The Maternal Health & Perinatal Care and the Pre-Inter Conception Workgroups are two of several workgroups of the HMIHC's Early Childhood Action Strategy Team One, "Healthy & Welcomed Births." The goal of HMIHC is to improve maternal and infant health outcomes while advancing health equity and reproductive justice by enhancing systems and support for Hawai‘i families and communities.

8) FHSD/MCHB continued to provide support and resources for three major projects of the HMIHC Pre/Inter-Conception Workgroup: Statewide One Key Question Certification, Access to Birth Control Methods, and the Pregnancy and Sexually Transmitted Disease Prevention Incentive Project for Adolescents and Young Adults. These projects were implemented in collaboration with a health or community-based organization. All three projects focus on increasing access to birth control methods, family planning, and preventing the spread of STDs and Sexually Transmitted Infections.

9) FHSD/MCHB continued to partner with the community-based organization Teen Links Hawai‘i under the Coalition for a Drug-Free Hawai‘i. Teen Links Hawai‘i is a web-based support for teens that provides youth empowerment, outreach, education, and training on many topics (e.g., relations building, cooking, mental health supports, etc.), including referral services for teens, parents, caregivers, educators, and the general public. Some topics on Teen Links Hawai‘i include mental health, physical wellness, safe place, accessing healthcare, COVID-19, substance use, and birth control methods.

10) MCHB Family Planning and Perinatal Support Services Programs combined contracts for the underinsured and uninsured to offer an array of clinical and reproductive health services for adolescents, women, and men before, during, and after pregnancy, promoting healthy lifestyles and reproductive health planning.

11) MCHB entered into contracted agreements with the community organization "Healthy Mothers, Healthy Babies" to assist with the healthcare and prevention activities related to perinatal care for the underinsured and uninsured, including helping to purchase medical equipment and supplies for the mobile clinics on Oahu, Hawai‘i Island, and Maui.

Collaborative Efforts – Hawai‘i

1) Trauma-informed care approaches are vital to addressing the impact of trauma that affects every aspect of health. The CDC has reported that there is no single technique to address trauma-informed approaches that benefits staff and clients. Key factors that are essential include establishing safety, trustworthiness/transparency, peer support, collaboration, empowerment, voice, and choice while implementing approaches to balance cultural, historical, and gender influences.

2) FHSD/MCHB continues to arrange meetings with local and national experts on trauma-informed care to arrange for future activities, including training for staff and community stakeholders on how to incorporate best practice trauma-informed care approaches and improving client and staff well-being.

3) The FHSD/MCHB facilitates collaborative Fatality Review meetings with public and private agencies to discuss Hawai‘i system supports for fatality reviews and strategies to reduce and limit preventable deaths in Hawai‘i. Topic areas worked on were:

    a) Meetings with some of the birthing hospitals in the state to initiate pilot projects to support the implementation of the Fetal and Infant Mortality Review (FIMR), a community-based process that reviews fetal and infant deaths, identifying factors that may contribute to the deaths.
    b) Strategies to reduce and limit preventable deaths for the residents and visitors of Hawai‘i.
    c) Identification of training/educational needs for fatality review stakeholders and the public.
    d) Supporting existing relationships with agencies that provide information to fatality reviews (e.g., medical examiners, vital records, medical and healthcare facilities, clinics, private physicians, etc.).
    e) Establishing new relationships within the community to support prevention recommendation implementation for the general public. The MCHB formed a new collaborative relationship with the State of Hawai‘i Department of Public Safety and Women's Community Correctional Facility, which serves female offenders at maximum, medium, and minimum custody levels. Intended supports and resources will be focused on Family Planning initiatives and information post-discharge.

4) The Hawai‘i Maternal & Infant Health Collaborative (HMIHC) emphasizes improving maternal and infant health outcomes for families and children of Hawai‘i. The group comprises public-private partners that provide announcements, recommendations, and support to communities statewide.

National Collaborative Efforts 2023

1) The State DOH and HMMRC team will continue to consult with and attend pertinent trainings from the CDC, Partnerships & Resources Maternal Mortality Prevention Team. This practice will assist and support the HMMR in utilizing best practices, ensuring that quality data and recommendations are in place to prevent and reduce maternal deaths.

    a) Technical assistance is available to the DOH FHSD/MCHB HMMR Committee from the CDC on items related to maternal mortality and morbidity.

b) Virtual and in-person resources, conferences, and workshops are also offered throughout the year.
c) In March 2023, the CDC released the trends in pregnancy-related deaths from 1987 – 2019. Through this report, the CDC points out that considerable racial/ethnic disparities in pregnancy-related mortality exist, and in Hawai‘i during 2017-2019, the pregnancy-related mortality ratio by race/ethnicity was 62.8 deaths per 100,000 live births among non-Hispanic Native Hawaiian or Other Pacific Islander persons.
d) Since the Pregnancy Mortality Surveillance System was implemented, the number of reported pregnancy-related deaths in the United States increased from 7.2 deaths per 100,000 live births in 1987 to 17.6 deaths per 100,000 live births in 2019.
e) CDC explains that the identification of pregnancy-related deaths has improved over time due to the use of computerized data linkages between death records and birth and fetal death records by states, changes in the way causes of death are coded, and the addition of a pregnancy checkbox to death records. However, errors in reported pregnancy status on death records have been described, potentially leading to an overestimation of the number of pregnancy-related deaths.
f) The DOH is currently working with the DOH Vital Records to link birth and death records.

g) FHSD/MCHB provided opportunities and paid registration fees, allowing for in-person attendance at national conferences for families, community stakeholders, and FHSD/MCHB staff at the 2023 Association of Maternal and Child Health Programs (AMCHP), a flexible gathering of MCH leaders and thinkers, and at the 2023 CityMatCH, a national organization of city and county health departments' maternal and child health (MCH) programs, leaders representing urban communities in the United States with the mission to strengthen public health leaders and organizations to promote equity and improve the health of urban women, families, and communities.

h) FHSD/MCHB continues to administer the Community Based Child Abuse Prevention Grant (CBCAP) program of the Department of Health and Human Services, Administration for Children and Families with consultation and guidance from federal project officers that provides supports to develop, operate, expand, and enhance community-based, prevention-focused programs and activities designed to strengthen and support families to prevent child abuse and neglect.

i) FHSD/MCHB continues to facilitate the statewide Domestic Violence Fatality Reviews with public and private agencies reviewing near-deaths and deaths to identify prevention strategies limiting and reducing future domestic violence for men, women, and children. National experts in Arizona also provide consultation for the Hawai‘i team.

j) FHSD/MCHB continued to administer the Maternal, Infant, Early Childhood, Home Visiting Program grant and completed the following activities contributing to preventive measures for women, families, and children:

    i) Technology was used to support contracted providers in submitting referrals and other required documents in an electronic system, allowing more staff hours working with families.
    ii) Home visiting providers were supported in virtual visits to families, women, and children and will resume in-person visits as applicable.
    iii) Continued voluntary, evidence-based services and supports empowering families with tools to thrive. Some of these services include providing family-strengthening strategies, connections to clinical providers, and referrals to other needed

community services.

iv) The MIECHV Program supports home visiting for pregnant women and families with children up to kindergarten entry living in communities at risk for poor maternal and child health outcomes.
v) Home visits are conducted by nurses, social workers, early childhood educators, and other trained professionals during pregnancy and early childhood to support and improve the lives of women, children, and families.

Hawai‘i Maternal Mortality Review Data

In 2023, the committee reviewed 10 maternal deaths occurring in 2020 and started the 2021 review. The DOH Office of Health Status Monitoring (Vital Records) obtained information on the deaths.

1) 2021 – There were 11 maternal deaths reported. Information below was abstracted from DOH Vital Records prior to the case reviews by the Maternal Mortality Review Committee.
   a) Of the 11 maternal deaths, the categories of the manner of death include: accident (2), suicide (2), natural (7)
   b) Trends – Two deaths were suicides, and two deaths were accidents.
   c) The age range of maternal deaths: 19-46 years.
   d) Residence County of maternal deaths
      i. Accident – Honolulu (2)
      ii. Suicide – Kauai (1), Maui (1)
      iii. Natural – Honolulu (6), Hawai‘i Island (1)

2) 2022 - There were 10 maternal deaths reported. Information below was abstracted from DOH Vital Records prior to the case reviews by the Hawai‘i Maternal Mortality Review Committee.
   a) Of the 10 maternal deaths, the categories of the manner of death include: accident (2), natural (6), homicide (2)
   b) Trends – Two deaths were homicides, and 2 deaths were accidents.
   c) The age range of the maternal deaths: 26-55 years
   d) Residence county of maternal deaths
      i. Accident – Hawai‘i (1), Honolulu (1)
      ii. Homicide – Honolulu (2)
      iii. Natural – Honolulu (4), Maui (2)

Recommendations and Action

1) With the DOH new CDC Preventing Maternal Deaths; Hawai‘i Maternal Mortality Review Committee Grant, the DOH FHSD/MCHB will support the following activities:

a) The collection and analysis of data to identify strategies for prevention of pregnancy-related deaths and reduction of disparities in pregnancy-related mortality.
b) Will increase the medical records abstraction of clinical/non-clinical data into a standard data system (Maternal Mortality Review Information Application, “MMRIA”).
c) In partnership with CDC, quality assurance processes will be used to improve data quality, completeness, and timeliness. Recipients will analyze data and share findings to inform prevention strategies that reduce pregnancy-related deaths, with a focus on reducing inequities.
d) Will support media campaigns to increase awareness of pregnancy-related severe complications and to empower people, especially Native Hawaiians and Pacific Islanders, who are pregnant or postpartum to speak up and raise concerns related to implicit bias, maternal mortality, and morbidity in Hawai‘i.

e) Will help to support a mobile clinic on Oahu for reproductive health care activities and counseling to the homeless communities, uninsured/underinsured while pregnant, during pregnancy, and postpartum.

2) DOH FHSD/MCHB will direct funding for birthing hospitals to educate women with a history of substance misuse about the increased risk of overdose in the postpartum period and the importance of prenatal care, especially in the context of substance use disorder (SUD).

3) DOH FHSD/MCHB will continue to participate in discussions and possible decision-making to support the implementation of recommendations from a public health perspective with interested community partners on Hawai‘i-based AIM (Alliance for Innovation on Maternal Health), with a focus on the care for pregnant and postpartum people with substance use disorder (SUD) bundle.

4) DOH FHSD/MCHB will advocate for incarcerated pregnant women with SUD to ensure that perinatal care, as well as counseling, is in place prior to discharge to the community.

5) DOH FHSD/MCHB will assist in providing information to reduce domestic violence in the perinatal period through survivor-centered and culturally appropriate coordinated services.

6) DOH FHSD/MCHB will offer a diversity and inclusion conference and partner with the Healthcare Association of Hawai‘i (HAH) to ensure that healthcare facilities increase the cultural competency/humility of the clinical workforce, focusing on the important context of the maternal health disparities observed by public health and other health professionals in their work.

7) DOH FHSD/MCHB will continue as committee members on the Hawai‘i Maternal & Infant Health Collaborative and Recommendation Implementation Workgroups.

8) In recognition of the importance of healthy pregnancies, MCHB will continue to lead the effort to encourage improved coordination of implementing the “One Key Question®" in hospitals, health centers, and private physician offices and increase the presence of school-based health centers as a way to improve access to contraception and family planning for younger women (e.g., college campuses).

9) DOH FHSD/MCHB will continue to facilitate meetings with interested private and public stakeholders to discuss plans of action for the implementation of HMMRC recommendations from a public health and medical perspective with focus on educating the community about the importance and realities of mental health care to prevent stigma and to support strategies to diversify the mental health workforce.

10) DOH FHSD/MCHB will continue to explore approaches to increase the number of health navigators and interpreters at clinics/provider's offices and the development of a women-centered mechanism that incentivizes women and their families to obtain prevention services.