

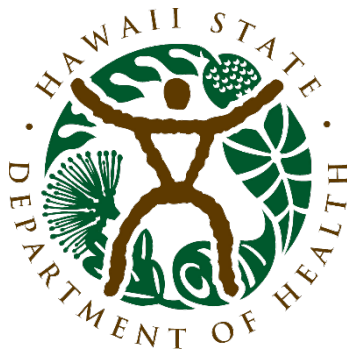
REPORT TO THE THIRTY-THIRD LEGISLATURE

STATE OF HAWAI'I

2025

**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 HAWAI'I
DEPARTMENT OF HEALTH
HEALTH RESOURCES ADMINISTRATION
FAMILY HEALTH SERVICES DIVISION
MATERNAL AND CHILD HEALTH BRANCH**

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SUMMARY

The Hawai'i State Department of Health's (DOH) mission is to promote and protect the physical, psychological, and environmental health of the people of Hawai'i through assessment, policy development, and assurance. Our vision is for Hawai'i residents to have a fair and just opportunity to achieve optimal health and well-being.

We acknowledge the children who died; the individuals who died during or after pregnancy; the loved ones they left behind; and the people who cared for them. We acknowledge, too, that child deaths and maternal mortality and morbidity do not impact all communities equally. 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 Hawai'i. The Child Death Review (CDR) and the Maternal Mortality Review (MMR) would not be possible without the committee members who volunteer their time and expertise to improve child and perinatal healthcare in the state of Hawai'i.

The DOH provides an annual report on the department's child death review and maternal mortality review activities, trends and recommendations for system changes, and any proposed legislation.

The information within this report emphasizes the importance of continued Hawai'i fatality reviews of child and maternal deaths to reduce and limit future deaths. The identification of preventive 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 Hawai'i.

The goals of the CDR and the MMR are multifaceted and will meet the needs of many different agencies, ranging from the investigation of deaths to the prevention of deaths. The multidisciplinary review process of maternal and child deaths allows for a far more substantial investigation into the circumstances of a maternal and/or child's death than that achieved using death certificate-based vital statistics alone. Vital statistics can provide the total number of deaths, age, and race/ethnicity, but death certificate-based data provides little preventative information regarding critical circumstances surrounding those deaths.

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; the proper classification for 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 preventative interaction between public health agencies that work together with healthcare providers, communities, and other interested public and private agencies.

Recommendations included in this report address a broad spectrum of needs and opportunities. The DOH has identified two key areas of focus: 1) improving behavioral health care and 2) ensuring that all recommendations specifically address and benefit Native Hawaiian and Pacific Islander (NHPI) communities. As stated in the January 25, 2024, Centers for Disease Control and Prevention (CDC) write-up titled "Health Disparities in Native Hawaiians and Other Pacific Islanders," health disparities create challenges for specific groups to get the care they need. These disparities include HIV, STDs, viral hepatitis, and

tuberculosis. Focusing efforts on these two key areas will significantly improve child health and perinatal care in Hawai'i and reduce maternal and child mortality.

CHILD DEATH REVIEW

A. Overview of the CDR Process

A child's death is a community tragedy, and the responsibility does not rest in any one place. The death of a child is a sentinel event that should catalyze action. The fatality review team is a diverse, multidisciplinary group of professionals who come together to understand the complex, multifaceted factors surrounding the death of a child. In short, CDR statewide committee reviews seek to understand the "how" and "why" of the circumstances surrounding the child's death to prevent future deaths.

History of the CDR 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 Statutes.
- 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 using child death reviews upon written request from the Director of Health. HRS §321-346 provides for immunity from liability and 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 of the Child Death Review to the Hawai'i State Department of Health. This gave the DOH the 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 (FHSD), Maternal and Child Health Branch (MCHB) to implement these multidisciplinary and multiagency reviews of child deaths.
- 5) The DOH 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 three branches: Children with Special Health Needs Branch (CSHNB); Women, Infants, and Children (WIC); and MCHB.

- 6) A core aspect of MCHB is administering services to reduce health disparities for women, children, and families in Hawai'i. One key element of administering preventive public health services directed by MCHB is through three fatality reviews: child death, maternal mortality, and domestic violence. The division's three branches work in collaboration, sharing information to assist in identifying critical facts to prevent and reduce similar future 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 for 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 (NCFRP) and supported by the U.S. Department of Health and Human Services (HHS), Health Resources and Administration (HRSA), 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 NCFRP is funded in part by a Cooperative Agreement from the HHS, HRSA, Maternal and Child Health Bureau. It 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; and
- c) Provides webinars, training, data support, and resource development to Hawai'i.

C. Federal Funds for CDR 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 (CBCAP) (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 are paired with families who have limited support 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 (PREP) (federal grant) – supports organizations and communities to reduce the risk of youth homelessness, adolescent pregnancy, and domestic violence.
- 3) Rape Prevention and Education (RPE) 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 HRSA'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 uninsured, low-income, and hard-to-reach individuals. This is done in tandem with private and public agency partnerships, such as healthcare agencies, the Hawai'i State Department of Human Services, and Essential Access Health, administrator of federal Title X family planning services grant.

D. Child Death Review Data

1) Total number of child deaths in 2023: 118

a) Non-natural deaths: 46

A non-natural death is a death that occurs from an external cause, rather than from natural causes like aging or disease. Examples of non-natural deaths include:

- i. Accidents, such as road accidents, falls, or drowning.
- ii. Violent deaths, such as homicides or manslaughter.
- iii. Suicides or intentional self-harm.
- iv. Poisoning or overdoses, whether intentional or unintentional.
- v. Complications from medical or surgical treatments.
- vi. Exposure to smoke or fire.

b) Natural Deaths: 72

A natural death is a death that occurs due to an internal factor, such as disease or natural processes, and not an external factor, such as an accident or violence.

Examples of natural deaths include:

- i. Cancer, heart disease, diabetes, pneumonia, diarrheal disease, stroke, and sudden organ failure.
- ii. Congenital anomalies, genetic disorders, serious infections, and respiratory failure.
- iii. Sudden Infant Death Syndrome and Sudden Unexpected Infant Death.

2) Number of child deaths in state custody: 3

a) State custody includes:

- i. Department of Human Services, Social Services Division, Child Welfare Services. Cause and manner of these deaths are pending further investigation and/or laboratory studies by the Department of the Medical Examiner.

3) Trends – Data Gathered through the DOH, Office of Health Status Monitoring.

a) More than half of the non-natural child deaths occurred in Honolulu County:

- i. Honolulu County – 29
 - Accident – 7
 - Suicide – 7
 - Homicide – 3
 - Undetermined – 10
 - Pending – 2
- ii. Hawai'i County – 7

- iii. Maui County – 9
 - iv. Kaua'i County – 1
- b) There were 9 suicide cases in 2023 (all between 11-17 years old):
 - i. Honolulu County – 7
 - ii. Hawai'i County – 1
 - iii. Kaua'i County – 1
- c) Of the 20 non-natural infant deaths:
 - i. Accident – 6
 - ii. Homicide – 1
 - iii. Undetermined – 13

4) Recommendations for System Changes

- a) Implement strategies to employ people with lived experiences in the CDR committee.
- b) Continue working with the Hawai'i Youth Correctional Facility (HYCF) with incarcerated youth and professional development activities to build the capacity of the Youth Correctional Officers to work with this population, utilizing a restorative approach rather than punitive.
- c) Continue to develop partnerships with health and youth service providers to promote adolescent health and annual wellness visits of youth ages 12-17 years old.
- d) Continue to increase prevention strategies for promoting child and adolescent wellness, including developing mobile-responsive social media and other online content for both parents and adolescents.
- e) Continue to provide opportunities for youth to be a part of decision-making for suicide and motor vehicle preventive strategies, i.e., peer-to-peer programs in schools to prevent violence, bullying, shooting, suicide, etc.
- f) Continue collaborating with public and private agencies to ensure the services provided are accessible, culturally appropriate, and responsive to the community's needs.
- g) Support the expansion of the PURPLE Crying program to all birthing hospitals in Hawai'i. Currently, on O'ahu, only Kapi'olani Medical Center for Women and Children (KMCWC), Tripler Medical Center (TMC), and Wilcox Medical Center (WMC) on Kaua'i have the program funded. This evidence-based program commits to preventing shaken baby syndrome/abusive head trauma and promoting the well-being of infants by supporting and educating families, caregivers, and professionals.

5) Legislation in the Near Future

- 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 the 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 HRS §321-341, Child Death Review Statute, 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. Continue to work on the implementation of the FIMR committee in collaboration with KMCWC and the Hawai'i Maternal and Infant Health Collaborative (HMIHC) to improve data quality and to support prevention activities to reduce and limit the amount of premature, fetal, and infant stillborn rates.
 - iv. KMCWC is considered the birth facility that offers the most comprehensive maternity and newborn care in the Pacific Region and is the only hospital in the state with physicians (neonatologists) specializing in newborn care on-site 24 hours a day. Since KMCWC provides the highest level of care for newborns, many Hawai'i hospitals and physicians count on it when babies require more intensive care, transferring more than 250 babies to KMCWC annually.

E. Preventive Program Activities

- 1) The DOH continues to launch yearly 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 Safe Sleep Summit by the DOH, in collaboration with other public and private partners, was held in August 2024 and provided an opportunity for families, providers, and community partners to learn about safe infant sleep guidelines. The keynote speaker was Dr. Racheal Moon, a Harrison Distinguished Teaching Professor of Pediatrics at the University of Virginia School of Medicine. She was instrumental in encouraging providers and agencies to listen to what parents are saying, meet them where they are at, and value the multiple cultural perspectives to learn how to speak with families.

The DOH continues to support families and caregivers of children who cannot provide a safe sleep environment by distributing safe sleep information for infants, cribs, bassinets, and play yards.

Neighbor island partners and organizations continue to provide safe sleep education and promote safe sleep practices. In 2024, the DOH also awarded Healthy Mother,

Healthy Babies a contract to assist in providing safe sleep education and crib distribution in Kaua'i, Maui, and Hawai'i counties.

- 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 a 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 was available to other physicians on the DOH website in 2024. Another suggestion made by the HMIHC was to offer fetal death certificate training for birthing hospital providers to increase the provider's knowledge of the importance of and best practices for reporting fetal death information. Improved fetal death data is key for improving maternal and child health. Despite efforts to improve the quality of the data collected, the quality of fetal death data continues to be of concern.
- 3) Other DOH-sponsored activities for preventing and reducing child deaths.
 - a) Contracts with local television and radio stations to utilize media for public service announcements on the importance of prenatal care before birth and during pregnancy to target women and mothers ages 18-40 years. The DOH's media initiatives also emphasize perinatal care during pregnancy, labor, delivery, postpartum, and neonatal periods.
 - b) Administer contract with Child & Family Service for the administration of the "The Parent Line" – a statewide, confidential telephone line that provides resources and information child behavior, child development, parenting, caregiver support, and community resources, including resources available during and after the Maui wildfires in 2023.
 - c) Coordination of domestic violence and rape prevention workshops and seminars for families and public and private agencies, organizing and facilitating the Hawai'i Domestic Violence Fatality Review (DVFR) process for four county DVFR teams. There are four reviews completed each year on domestic violence-related homicides, suicides, and near-deaths. Recommendations include legislation and organizational policy, training, agency coordination, community education, and primary prevention.

F. CDR Implementation of Recommended Activities (January 2024 – December 2024)

Honolulu County

- 1) The DOH CDR Registered Nurse Coordinator (O'ahu) continues collaborating with the nurses from Maui, Kaua'i, and Hawai'i Island to conduct the CDR in each county.
- 2) With stakeholders from the University of Hawai'i at Mānoa, John A. Burns School of Medicine, recommendations were provided on the importance of incorporating more equity, diversity, and inclusion activities from a cultural viewpoint, emphasizing positive health outcomes for Native Hawaiians and Other Pacific Islanders.
- 3) Continued working with an OBGYN from the KMCWC and the HMIHC to improve data quality and implement the FIMR.

- 4) Partners with private and public agencies, including KMCWC, Emergency Medical Services, fire departments, public health nurses, military, and Department of Education administrators, to implement priorities of the CDR recommendations on drowning, suicides, and motor vehicle accidents.
- 5) Supported Honolulu Theatre for Youth to develop and produce a performance for elementary-aged youth and their families. The stories from youth centered around celebrating friendships and being there for each other when friends are happy, sad, or need a friend.
- 6) Provide financial supports to mobile clinics that travel to shelters and homeless communities in rural areas on O‘ahu, Hawai‘i Island, and Maui that offer clinical services outside of a hospital or office setting. These clinics deliver a wide variety of healthcare services to underinsured and uninsured families.

Maui County (Maui, Lāna‘i, Moloka‘i)

- 1) A registered nurse was recently hired and attended the O‘ahu CDR in September 2024. Maui CDR meeting will be scheduled with support from the O‘ahu registered nurse.
- 2) 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.
- 3) 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.
- 4) Contracted the System of Services Coordination for children, families, and their providers in Maui County.
- 5) Purchased medical equipment for a mobile clinic relocated to Maui, helping families affected by the Maui wildfires and sponsored the Lahaina Health Fair with a focus on the Maui Wildfire & Resilience Resource Guide to support those affected.

Hawai‘i County

- 1) Community Organization started the Perinatal Health Consortia in 2024 to facilitate a workgroup focused on improving birth outcomes and other measures surrounding women's perinatal, postpartum, and interconnectional health in Hawai‘i County.
- 2) Working on breastfeeding Promotion Project to promote and support extended and exclusive breastfeeding that builds upon cultural strengths and acknowledges traditional practices.
- 3) Working on a Child Injury Prevention Initiatives Project to disseminate evidence-based health information and incentives to reduce unintentional nonfatal/fatal injuries in children.

- 4) Car seat inspections event 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.

Kaua'i County

- 1) Continued contract with the Kaua'i Planning and Action Alliance for a Kaua'i Maternal Child Health Community Health Worker (CHW) and a Kaua'i migrant MCH CHW specifically serving Pacific Islanders.
- 2) Provided logistical support for child car seat training, workshops, and multiple car seat check events, including on the west side with Kaua'i Veterans Memorial Hospital (KVMH).
- 3) Conducted a CDR on Kaua'i in November 2023 that included cases related to unsafe sleep deaths. Based on the review, a follow-up survey was conducted with over 50 parents on Kaua'i who shared their recommendations for safe sleep practices. Based on survey results, a radio ad on safe sleep is playing on Kaua'i radio stations. Presented the results of the Kaua'i safe sleep survey at the 2024 Hawai'i Safe Sleep Summit.
- 4) Continued to maintain the family resource kiosk on the main shopping mall on Kaua'i that has brochures/information on community resources, including safe sleep, car seats, drowning, and suicide prevention. The shopping mall kiosk distributes over 1,000 brochures and flyers each year.
- 5) Started several 'mini kiosks' on Kaua'i. Mini kiosks are small standing brochure holders that have community resource information on child safety. As of September 2024, Kaua'i has about 10 mini kiosks installed, mainly at affordable/low-income housing communities around the island from Waimea to Princeville. There is also a plan to install several more mini kiosks in other locations on Kaua'i.
- 6) Implemented a student video competition focusing on youth mental health and drug and alcohol prevention called Healthy Me Healthy We Project. The Kaua'i DOH collaborated with schools and received 27 videos and flyers from middle and high school students. The video was placed on the DOH's Child and Adolescent Mental Health Division's (CAMHD) website, and the DOH CAMDH is running the video in an online and social media ad campaign targeting youth across the state.
- 7) Planning to conduct the Kaua'i CDR in November 2024 to include cases involving youth motor vehicular accidents.
- 8) Supported Kaua'i Veterans Memorial Hospital (KVMH) Labor and Delivery Department with a simulation manikin lab for training on maternal obstetric emergencies and an online training for the latest clinical recommendations on high-risk pregnancy emergencies for labor and delivery nurses and other providers from KVMH.

F. Collaborative Efforts

MCHB collaborates with community agencies (public and private) to develop preventive strategies to reduce child deaths.

The DOH continues to support the HMIHC, a public-private agency and influential group that assists in improving maternal and infant health outcomes and enhancing systems and support for families and communities in Hawai'i. Specific workgroups with community members emphasize preventive activities to reduce and limit the deaths of preterm babies.

These collaborative efforts enable communities to generate a deep understanding, identify underlying risk and protective factors, and create meaningful change for safer, more equitable communities.

G. State Collaboration

- a) The MCHB 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.
- b) 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:
 - i. Recommendations from the team have included possible legislative requests to improve state fatality systems;
 - ii. Strategies to reduce and limit preventable deaths for the residents and visitors of Hawai'i;
 - iii. Identification of training/educational needs for fatality review stakeholders and the public;
 - iv. Supporting existing relationships with agencies that provide information to fatality reviews (e.g., medical examiners, vital records, medical, and other specialty) areas; and,
 - v. Establishing new relationships within the community to support implementing preventive recommendations for the public.

H. National Collaboration

- 1) Continued consultation with the NCFRP for technical support and use of the Case Reporting System.
- 2) In September 2024, the DOH sponsored staff, families, providers, and other stakeholders to attend the annual CityMatCH conference held in Seattle, Washington. The theme of the CityMatCH Conference was Reaching New Heights: Strengthening Maternal and Child Health Across Generations. The conference sessions focused on the importance of sharing data for action, ongoing research, evaluation, and disease surveillance projects to benefit American Indian and native populations in urban and rural settings, including people with lived experiences in MMR/CDR/FIMR committees. There was also a focus on strengthening public health leaders and organizations to promote equity and improve the

health of women, families, and communities.

- 3) The DOH Women, 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

A. Overview of the MMR Process

The function of the Maternal Mortality Review (MMR) is to conduct comprehensive, multidisciplinary reviews of maternal deaths to identify factors associated with these deaths to assist in reducing and limiting preventative maternal deaths in the future. Recommendations from MMR meetings include future system revisions to improve services for women.

The Centers for Disease Control and Prevention (CDC) are experts in providing maternal guidance to local health departments in the 46 states, Washington, D.C., Puerto Rico, and the U.S. Virgin Islands. They define positive pregnancy outcomes as healthy pregnancies that begin before conception and continue during pregnancy with regular prenatal care.

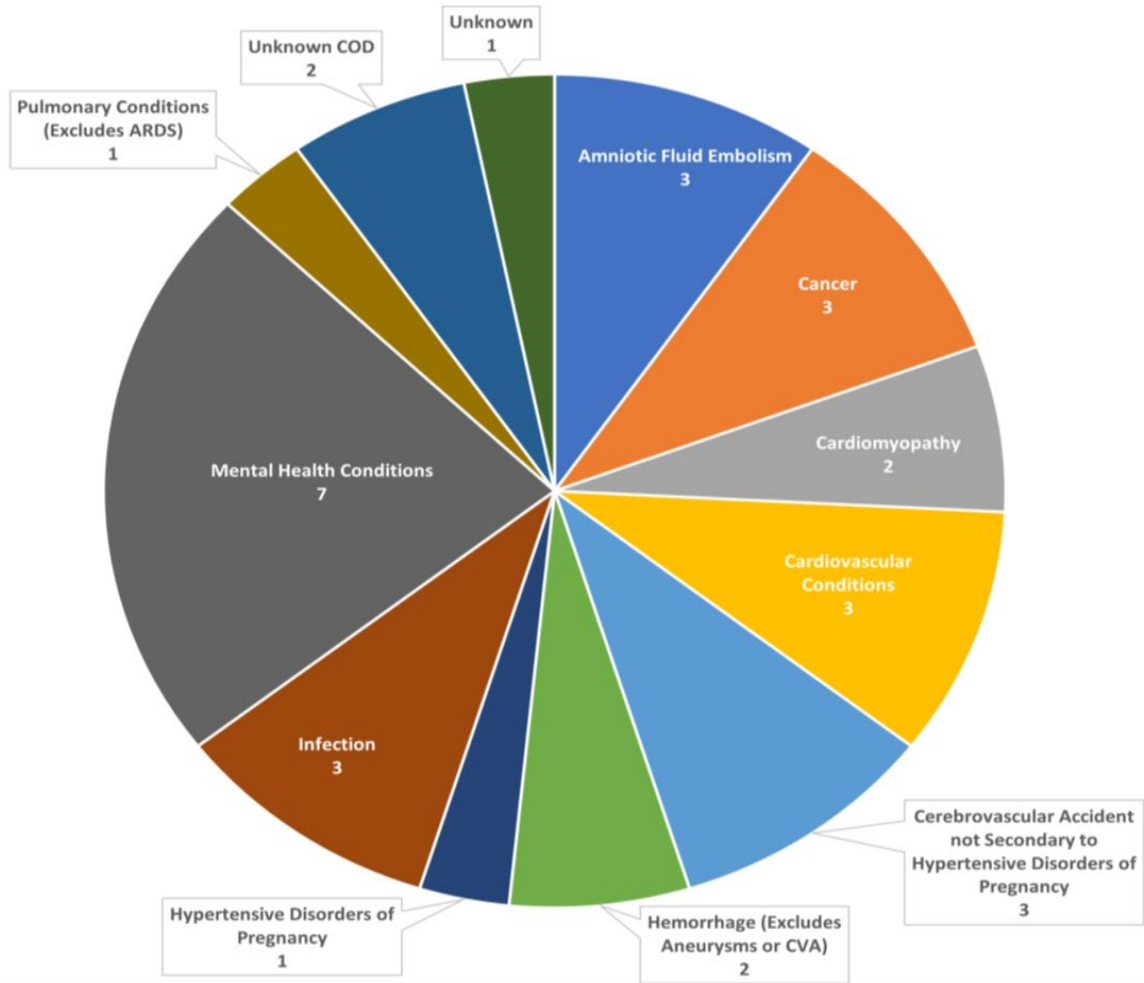
In Hawai'i, healthcare providers are instrumental in helping women prepare for pregnancy and any potential problems that may arise during pregnancy. Pregnant women's early initiation of prenatal care and health providers' continuous monitoring of pregnancy are essential in helping to prevent and treat severe pregnancy-related complications.

The United States continues to have the highest rate of maternal deaths of any high-income nation despite a decline since the COVID-19 pandemic. Most of these deaths, over 80%, are likely preventable (CDC, 2024). In Hawai'i, approximately 10 to 12 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.

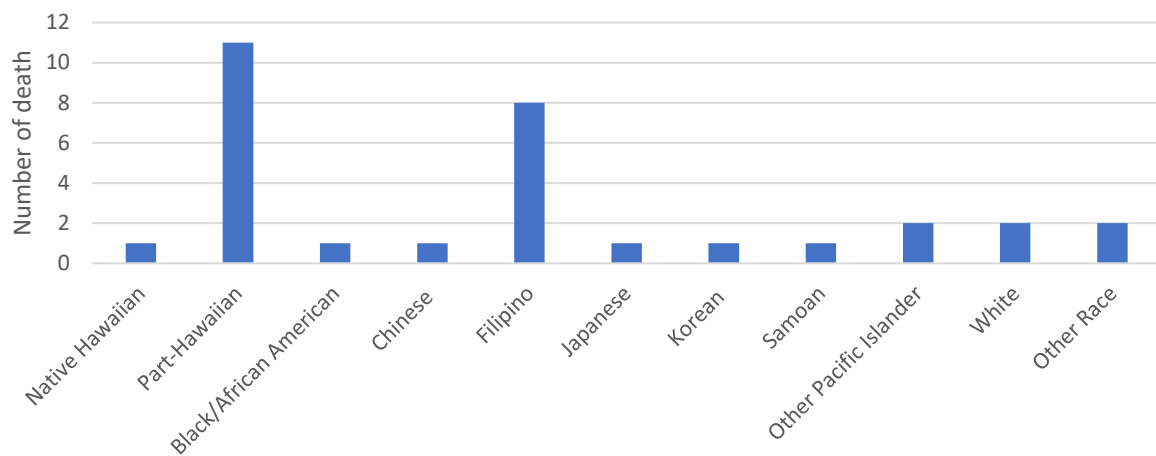
Native Hawaiian and Pacific Islander women experience maternal deaths at a higher rate, even though they make up a smaller proportion of women in the state, showing persistent ethnic disparities. Moreover, combined data from the MMRIA system (Maternal Mortality Review Information Application-CDC) show 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. Efforts to review maternal deaths are not a novel practice. 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 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.

Number of Pregnancy-Related Deaths by Cause of Death (2015-2021)



Number of pregnancy-related deaths by race (2015-2021)



Source: MMRIA, May 2024.

B. Maternal Mortality Review Summary

The HMMRC is administrated through the Hawai'i State Department of Health (DOH), Family Health Services Division (FHSD), Maternal and Child Health Branch (MCHB) and reviews all maternal deaths in the state. The process for a maternal mortality review is as follows:

- 1) The MCHB Research Statistician works in collaboration with the DOH Vital Records Office to gather information on maternal deaths.
- 2) The MCHB Registered Nurse (RN) Abstractor then initiates a record request. 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 RN and contracted RN providers review the available medical and other specialty reports to create case summaries discussed during the committee reviews.
- 4) Once the abstraction is complete, 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 members of the HMMRC sign a confidentiality agreement, which states that review material and proceedings of review meetings are privileged information for use only by committee members and DOH 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, the HMMRC recommends creating plans of action that address preventive strategies for pregnant women to limit and reduce future deaths. The committee members have access to de-identified clinical and nonclinical 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.

C. Program Activities

The activities below were completed in 2024:

- 1) Two MMRC meetings were held in June and December to review 2021 and 2022 maternal deaths. The findings were discussed and whether prevention strategies were based on them. Fatality review meetings were held via teleconferencing using a secure virtual platform.
- 2) The DOH/MCHB submitted a grant application in May 2024 for federal funding through the National Center for Chronic Disease Prevention and Death Promotion created by the Public Health Service Act, 301 (a) and Section 317K, 42 U.S.C. 241 (a); 42 U.S.C. 247b-12 project title “Enhancing Reviews and Surveillance to Eliminate Maternal Mortality.” The period of performance is five years, and the Hawai‘i DOH was awarded the grant in September 2024.
- 3) The FHSD continues to administer the Pregnancy Risk Assessment Monitoring System (PRAMS) funded by the CDC. This population-based surveillance system identifies and monitors maternal experiences, attitudes, and behaviors from preconception, through pregnancy, and into the interconception 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.
- 4) FHSD/MCHB continued to work with the 501(c)(3) nonprofit community organization Hawai‘i Children's Action Network, which is committed to advocating for children, coordinating training, and building workforce capacity for individuals/agencies that provide services to expectant and new moms. Primary stakeholders include physicians, healthcare providers, and other nonclinical staff.
- 5) 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 sharing of the HMMRC 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.
- 6) FHSD/MCHB collaborates with the HMIHC/Maternal Health Innovation (MHI-HRSA grant) to develop guidance for implementing maternal health innovations that best address statewide disparities to improve maternal health outcomes and ensure an equitable, positive perinatal experience for all families across the state of Hawai‘i.
- 7) FHSD/MCHB collaborates with HMIHC/Strategies to Repair Equity and Transform Community Health (STRETCH) 2.0 initiative (grant awarded to the HMIHC under Early Childhood Action Strategy [ECAS]). The FHSD/MCHB is one of seven collaboratives that will be participating in this initiative from now through Spring 2025. The collaborative will go through capacity-building activities to build and strengthen trust and accountability among partners; develop approaches to power-sharing; identify community priorities; and

build a shared set of actions to achieve their common goals of advancing health equity.

- 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 partnership with a health or community-based organization. All three projects focused on increasing access to birth control methods, family planning, and preventing the spread of sexually transmitted diseases and sexually transmitted infections.
- 9) FHSD/MCHB continued to partner with the community-based organization TeenLink Hawai'i under the Coalition for a Drug-Free Hawai'i. TeenLink Hawai'i is a web-based support for teens that provides youth empowerment, outreach, education, and training on many topics (e.g., relationship building, cooking, mental health supports, etc.), including referral services for teens, parents, caregivers, educators, and the public. Some topics on TeenLink Hawai'i include information on mental health, physical wellness, safe places, accessing healthcare, substance use support, and birth control methods.
- 10) MCHB Family Planning and Perinatal Support Services programs combined contracts for all individuals in need of reproductive healthcare, with priority for uninsured, low-income, and hard-to-reach individuals who are the most underserved and the least likely to access family planning services in a traditional healthcare setting.
- 11) MCHB continued to partner with the public health community organization Healthy Mothers, Healthy Babies Coalition of Hawai'i (HMHB) to assist with the healthcare and prevention activities related to perinatal care, helping to purchase medical equipment and supplies for mobile clinics on O'ahu, Hawai'i Island, and Maui. With challenges increasing in Maui due to the devastating wildfires in August 2023, there is a dire need to alleviate unnecessary barriers to quality reproductive care. Challenging areas to access healthcare services include rural areas and locations where families impacted by the Maui wildfires are still temporarily placed. Supports are needed to ensure such services are provided to maximize access, coordination, and provision in a seamless continuum of care to children, adolescents, women, and men across their lifespan.
- 12) MCHB supported a recognized community-based agency specializing in music and other traditional experiences to provide support and additional resources to encourage access to traditional, cultural-based activities for Native Hawaiian women in Honolulu County and Hawai'i County (Hilo and Kona). In conversations with leaders from the Native Hawaiian community, it was noted that a deeper understanding and appreciation of historical and cultural ideals, particularly within traditional ethnic arts, can significantly enhance the well-being of immigrant and ethnic minority groups. By recognizing and celebrating traditional ethnic arts, communities can create an inner sense of pride that honors cultural heritage; promote inclusivity; support the health and happiness of all members; and foster positive community relationships among Native Hawaiian women and their families.
- 13) MCHB administered a CDC MMR grant (ended on 9/29/24) to improve data quality, address health inequities, and identify strategies to prevent pregnancy-related deaths.

Some initiatives implemented using the current MMR Grant include:

- Supporting perinatal behavioral health coordination to prevent maternal deaths related to perinatal mood, anxiety disorders, and substance use disorders of women.
- Supported an agency by contracting with them to purchase medical equipment for their mobile clinic. This ensured perinatal assistance to underinsured and uninsured people with limited access to prenatal education, care-enabling services, healthcare, and behavioral health care.
- Implementing social media campaigns to support maternal health by increasing awareness of serious pregnancy-related complications and empowering people, especially Native Hawaiians and Pacific Islanders who are pregnant and postpartum, to speak up and raise concerns.
- Workforce trainings for medical providers working with expectant and new mothers. Training this past year included critical care obstetric emergencies training offered to labor and delivery nurses working on Kaua'i. Supported an agency to provide supplies for a simulation laboratory for practicing obstetric emergencies during pregnancy, such as pre-eclampsia, eclampsia, and hemorrhages. The simulation lab will help give clinicians the opportunity for hands-on deliberate practice, development of decision-making skills, and improved communication and teamwork.
- Dr. Rebecca Delafield from the John A. Burns School of Medicine provided Unconscious Bias Training and presented the results of her studies on Native Hawaiian maternal healthcare experiences to the HMMRC members.

D. State Collaboration

- 1) Trauma-informed care approaches are vital to addressing the impact of trauma on every aspect of health. The CDC has reported that there is no single technique to address trauma-informed care that benefits all staff and clients equally. However, key elements include safety, trustworthiness, transparency, peer support, collaboration, empowerment, voice, and choice with consideration of cultural, historical, and gender issues.
- 2) FHSD/MCHB continues to plan meetings with local experts on trauma-informed care to arrange future activities, including training for staff and community stakeholders on how to incorporate best practice trauma-informed care approaches, improving client and staff well-being.
- 3) FHSD/MCHB facilitates Collaborative Fatality Review (CFR) meetings with public and private agencies to discuss system supports for fatality reviews and strategies to reduce and limit preventable deaths in Hawai'i.
- 4) The HMIHC emphasizes improving maternal and infant health outcomes for Hawai'i families and children. The group consists of public-private partners, including representatives from MCHB and the DOH Office of Planning, Policy and Program Development. It provides announcements, recommendations, and support to the HMIHC partners.

E. National Collaboration

- 1) The 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 HMMRC in utilizing best practices, ensuring that quality data and recommendations are in place to prevent and reduce maternal deaths.
 - a) The CDC provides technical assistance to the DOH FHSD/MCHB HMMRC 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 May 2024, the CDC released the trends in pregnancy-related deaths from 1987–2020, showing that the number of reported pregnancy-related deaths in the United States increased from 7.2 deaths per 100,000 live births in 1987 to 24.9 deaths per 100,000 live births in 2020. The report also pointed out that in 2017–2019, the highest pregnancy-related mortality rate (PRMR) was among non-Hispanic Native Hawaiian or Other Pacific Islander persons. In 2020, the highest PRMR was among non-Hispanic American Indian or Alaska Native persons. Variability in the risk of death by race-ethnicity may be due to several factors, including access to care, quality of care, prevalence of chronic diseases, structural racism, and implicit biases. (Source: <https://www.cdc.gov/maternal-mortality/php/pregnancy-mortality-surveillance/index.html>).
 - d) The 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.
 - e) The DOH is currently working with the DOH Vital Records to link birth and death records to the MMRIA system.
- 2) FHSD/MCHB provided opportunities, paid registration fees, and provided travel accommodations for families and community stakeholders to attend national conferences in person.
 - a) The FHSD/MCHB staff attended the annual MMRIA User Meeting (MUM8) in Atlanta, Georgia, with other HMMRC members. The meeting provided essential training on critical elements of maternal mortality review that also supported fellow MMRIA users in sharing best practices and lessons learned utilizing MMRIA for innovative approaches to analyzing and reporting on maternal mortality 2024.

- b) FHSD/MCHB staff attended the Association of Maternal and Child Health Programs (AMCHP) held in Oakland, California, a flexible gathering of maternal and child health leaders and thinkers, where the conference theme was “Partnering with a Purpose” with a focus on collaboration and intentional partnerships making a positive impact on children and families.
 - c) Community stakeholders from Maui County, Lāna‘i, and FHSD/MCHB staff attended the 2024 CityMatCH Conference in Seattle, Washington, a national organization of city and county health departments, MCH programs, and leaders representing urban communities in the U.S. with the mission to strengthen public health leaders and organizations to promote equity and improve the health of urban women, families, and communities.
- 3) Domestic Violence & Sexual Assault supports continued in 2024 with the FHSD/MCHB Domestic Violence Fatality Reviews, enabling public and private agencies to conduct virtual statewide near-death and death reviews as related to domestic violence for men, women, and children.
- 4) FHSD/MCHB continues to administer the Community-Based Child Abuse Prevention Grant (CBCAP) program, which provides support with career development and educational resources for Pacific Islanders and Micronesian families. Other supports include information and support for expectant mothers, utilizing a neighborhood meeting place.
- 5) FHSD/MCHB continues to administer the Maternal, Infant, Early Childhood, Home Visiting (MIECHV) Program grant and has completed the activities listed below, which contribute to preventive measures for women, families, and children.
 - a) Technology was used to support contracted providers in submitting referrals and other required documents electronically, allowing for more staff hours spent working with families.
 - b) Home-visiting providers were supported in conducting virtual visits to families, women, and children and will resume in-person visits as applicable.
 - c) 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.
 - d) 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. Home visits are conducted by nurses, social workers, early childhood educators, or other trained professionals during pregnancy and early childhood to improve the lives of women, children, and families.

F. Hawai'i Maternal Mortality Review Data

During 2024, the HMMRC reviewed 10 maternal deaths occurring in the calendar year 2021 and 2022. Information on the deaths was obtained and abstracted from the DOH Office of Health Status Monitoring and Vital Records.

- 1) There were 10 maternal deaths reported in 2022:
 - a) Of the 10 maternal deaths, the categories of the manner of death include:
 - i. Accident – 2
 - ii. Natural – 6
 - iii. Homicide – 2
 - b) Trends:
 - i. Homicides – 2
 - ii. Accidents – 2
 - c) The age range of the maternal deaths: 26–45 years
 - d) County of residence:
 - i. Accident – Hawai'i County (1), Honolulu County (1)
 - ii. Homicide – Honolulu County (2)
 - iii. Natural – Honolulu County (4), Maui County (2)

- 2) There were 8 maternal deaths reported in 2023:
 - a) Of the 8 maternal deaths, the categories of the manner of death include:
 - i. Accident – 1
 - ii. Natural – 5
 - iii. Suicide – 1
 - iv. Pending – 1
 - b) Trends – one death was suicide, and one death was an accident.
 - c) The age range of the maternal deaths: 20–35 years
 - d) Residence County of maternal deaths:
 - i. Accident – Maui County (1)
 - ii. Suicide – Kaua'i County (1)
 - iii. Pending – Maui County (1)

G. Recommendations and Action

- 1) With the CDC Enhancing Reviews and Surveillance to Eliminate Maternal Mortality 5-Year Grant, the DOH FHSD/MCHB will support the following activities:
 - a) The identification of pregnancy-associated deaths; implementation of and data entry into MMRIA; and comprehensive, efficient, and effective abstraction of deaths.

- b) Work in collaboration with the HMMRC, HMIHC, and other interested stakeholders to discuss the CDC's recommendation of the possibility of including interviews with families of the decedents in the abstraction of the maternal death review process to improve future preventative strategies reducing and limiting maternal deaths in Hawai'i.
 - c) Community engagement project: Implement strategies to employ people with lived experiences in the HMMR committee (e.g., birthing person experience, fathers, doulas).
 - d) In partnership with the CDC, quality assurance processes will improve data quality, completeness, and timeliness. HMMRC members and FHSD/MCHB statistical staff will analyze data and share findings to inform families and other stakeholders of the preventable strategies that reduce pregnancy-related deaths, with a focus on reducing inequities.
 - e) Will continue to support media campaigns to increase awareness of serious pregnancy-related complications with a special focus on mental health and substance use disorder prevention and disseminate the National Mental Health Hotline 1-833-TLC-MAMA information.
 - f) Will help to support a mobile clinic for reproductive health care activities and counseling to homeless communities and the uninsured/underinsured pregnant, postpartum, and birthing population of O'ahu.
- 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 focus on the care for pregnant and postpartum people with 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 provide resources and information to prevent violence in the perinatal period through survivor-centered and culturally appropriate coordinated services.
 - 6) DOH FHSD/MCHB will continue as a Hawai'i Maternal & Infant Health Collaborative committee member.
 - 7) DOH FHSD/MCHB will work with public and private agencies to improve access to contraceptives and family planning information for women and men.

- 8) DOH FHSD/MCHB will continue to facilitate meetings with interested private and public stakeholders to discuss plans of action for implementing HMMRC recommendations from a public health and medical perspective. Emphasis will be placed on educating communities about the importance of coordinating mental health care to support families and the mental health workforce.
- 9) DOH FHSD/MCHB will continue to explore approaches to increasing the number of health navigators and interpreters at clinics and provider offices. Will also explore developing incentives for women and their families to obtain preventive services.