MATERNAL AND CHILD DEATH REVIEW PROGRAM

2019 QUARTERLY REPORT & RECOMMENDATION SUMMARY (JULY- SEPTEMBER)

ABOUT THE PROGRAM

The Alaska Maternal and Child Death Review (MCDR) program resembles the nationally recommended evidence-based model for systematically and comprehensively reviewing deaths using a multi-disciplinary decision making approach. Built on the public health approach, this model specifically aims to identify causes and contributing factors to maternal, infant, and child deaths in Alaska and develop recommendations to prevent future deaths. This goal is accomplished through expert committee reviews of medical records, autopsy reports, death scene investigation reports, and other relevant information that is compiled for every death.

MCDR committee members serve on a voluntary basis and are approved by the Department of Health and Social Services (DHSS) Commissioner and State of Alaska Medical Board. Committee membership include professionals with expertise in the field of maternal and child health and injury prevention, including pediatricians, neonatologists, obstetricians, and nurses as well as social workers, public health professionals, emergency response workers, and child protection workers.

ABOUT THIS REPORT

A total of 14 deaths of children aged 0 to 17 years were reviewed by the MCDR committee during the third quarter of 2019 (July – September). In addition to the systematic child death review, on September 20th, the MCDR held an annual meeting at which 10 maternal deaths were reviewed. Maternal deaths (also called pregnancy-associated deaths), are defined as the death of a woman while pregnant or within one year of the end of pregnancy.

The MCDR Committee reviews case files when all applicable records related to the death have been received, which can be several months following a fatality. Therefore, the information presented in this report does not represent the incidence or trend of child deaths in Alaska during this timeframe, but does describe the characteristics and prevention recommendations of those deaths reviewed.

Have these recommendations impacted your work?

If your agency makes any changes as a result of these recommendations we encourage you to tell us about them!

Email: hss.wcfh.MCDR@alaska.gov

This report is based only on the recommendations of services and public health efforts known to committee members who were present at the review meetings, and may not reflect all prevention/service efforts in place at the time of death or currently available. This report contains

all recommendations generated by the committee for the deaths reviewed during this quarter (both preventable and non-preventable). The recommendations presented are those of the MCDR committee and do not necessarily represent the views of the Alaska Division of Public health.

INFANT DEATHS (UNDER 1 YEAR OF AGE) (JULY-SEPTEMBER 2019)

- The committee reviewed 4 infant deaths. 1 death was due to unintentional asphyxia. 2 deaths were due to medical causes and 1 death had an undetermined cause.
- The death due to unintentional asphyxia and the undetermined death were both classified as Sudden Unexpected Infant Deaths (SUID) by the MCDR committee using the Centers for Disease Control and Prevention (CDC) classification guidelines.
- All deaths occurred in the postneonatal period.
- The review committee generated prevention recommendations for all 4 cases and determined that all of the deaths could have been prevented (100%).

Table 1. Prevention recommendations: Infant injury deaths

Cause of injury n = number of cases with recommendations	Committee Recommendations
Unintentional Asphyxia/SUID (n=1)	Parents should be allowed to stay in the room during resuscitation efforts ⁞ A second intraosseous infusion (IO) should not be placed in the same bone when the first fails ⁞ Continue safe sleep education efforts and include risk reduction techniques and ensure that exhaustion is identified as an impairment and parents are educated on how to identify impairment ⁞ Conduct a joint multidisciplinary investigation (to include law enforcement, medical examiner, OCS, and social work at minimum) that responds to all unexplained/unexpected child deaths to ensure complete and accurate information and timely cross-communication about investigative findings among agencies ⁞ Death investigations should be approached as homicides until proven otherwise ⁞ Agency personnel involved in unexplained/unexpected child deaths should receive annual training in proper death investigation techniques (to include law enforcement, ME, OCS, legal, and medical providers) ⁞ Create a multi-agency committee to champion consistent death investigation training across the state

Table 2. Prevention recommendations: Infant Medical/Undetermined deaths

Cause of death n = number of cases with recommendations	Committee Recommendations
Medical (n=2)	Tribal care system should conduct an assessment of reasons high risk pregnant women refuse to transfer to Anchorage for prenatal care and delivery services, and then reduce the barriers to recommended transport ⁞ Hub village birthing centers should document refusals by pregnant women to transfer to Anchorage and report these to larger tribal care system
	Do not allow more than 1-2 EMS personnel into death scene, when patient is obviously deceased, to preserve the crime scene ⁞ Clinics and providers should follow failure to thrive infants very closely, especially those in known high risk families ⁞ If officers get a call for a welfare check on an adult, officers should also check on any children present to ensure they are physically okay
Undetermined/SUID (n=1)	Safe sleep education should be provided at every pediatric office visit for at least the first 6 months of life ⁞ Establish contacts in all villages who can take body and scene photos immediately following all unexplained/unexpected deaths when law enforcement is not immediately available ⁞ Increase law enforcement presence in rural villages ⁞ Continue statewide safe sleep education efforts ⁞ OCS should be notified by the investigating agency of all unexplained/unexpected child deaths ⁞ Expand home nursing programs and eligibility criteria statewide ⁞ Conduct a joint multidisciplinary investigation (to include law enforcement, ME, OCS, and social work at minimum) that responds to all unexplained/unexpected child deaths to ensure complete and accurate information and timely cross communication about investigative findings among agencies ⁞ Death investigations should be approached as homicides until proven otherwise ⁞ Agency personnel that are involved in unexplained/unexpected child deaths should receive annual training in proper death investigations

Note: Some recommendations are duplicated due to case similarity or common risk factors that resulted in the same prevention recommendation.

CHILD DEATHS 1-17 YEARS (EXCLUDING SUICIDE) (JULY-SEPTEMBER 2019)

- The committee reviewed 10 deaths of children ages 1-17 years. Seven child deaths were due to medical causes. Two deaths were due to injuries (intoxication and fire) and 1 death was undetermined.
- The review committee generated prevention recommendations for all 10 cases and determined that 4 of the deaths could have been prevented (40%).

Table 3. Prevention recommendations: Child injury deaths

Cause of injury n = number of cases with recommendations	Committee Recommendations
Fire,Burn (n=1)	Get regular maintenance on vehicles and remove combustible materials from inside vehicles to prevent fires ⁞ Discourage people from leaving children unattended in cars ⁞ Educate homeowners to check fire extinguishers on an annual basis ⁞ OCS should practice doing global assessment of potential dangers instead of only focusing on incident information
Intoxication (n=1)	Install CO detectors in any dwelling where there is a fueled appliance ⁞ Fueled appliances must be properly installed and serviced according to manufacturer recommendations ⁞ If a death investigation finds that CO intoxication was caused by an improperly installed fueled applicance, investigations should require homeowners to have the appliance installed by a professional and follow up to ensure it is completed

Table 4. Prevention recommendations: Child Medical/Undetermined deaths

Cause of death n = number of cases with recommendations	Committee Recommendations
Medical (n=7)	Ensure medical condition 'problem lists' in medical charts are up to date with critical problems listed at the top and also include social issues (ex-difficult airway, violence by parents towards providers, OCS history, Arctic Variant CPT1A) ⁞ Legislation should be passed to mandate reporting to the state health information exchange for problem lists, allergies, medication lists, and discharge summaries ⁞ Increase role of mental health support in families with medically complex children before parents demonstrate poor coping skills ⁞ Medically complex children should continue to have pediatric hospitalist care during admissions ⁞ Medical providers should be contacted when OCS receives a report of medical neglect
	Ensure medical condition 'problem lists' in medical charts are up to date with critical problems listed at the top and also include social issues (ex-difficult airway, violence by parents towards providers, OCS history, Arctic Variant CPT1A) ⁞ Improve communication between the pediatric floor and the PICU for chronically ill children who are not DNR/DNI but are being treated with a palliative approach ⁞ OCS reports should be made when parents assault providers in the hospital ⁞ Legislation should be passed to mandate reporting to the state health information exchange for problem lists, allergies, medication lists, and discharge summaries ⁞ Education should be provided to medical personnel and social workers on OCS's role

	with complex medical children when parents are struggling (when and when not to make a report) ⁞ Increase role of mental health support in families with medically complex children before parents demonstrate poor coping skills ⁞ medically complex children should continue to have pediatric hospitalist care during admissions
	Healthcare providers should continue to notify State Epidemiology of clusters of cancer to be investigated for environmental factors ⁞ All hospitals, including rural hospitals, should maintain a palliative care unit.
	Increase communication between smaller remote clinics and larger hospitals for medically complex children
	OCS should contact the child's medical providers as soon as OCS receives a report of medical neglect ⁞ Expand pediatric hospice and palliative care throughout the state
	Premature infants with slow weight gain should be followed closely with regular weight checks ⁞ Ensure problem lists have true problems at the top and are up to date and also include social issues (difficult airway, violence by parents towards providers, OCS history, Arctic Variant CPT1A) ⁞ Statewide education on infectious diseases should be provided to medical providers to ensure symptoms are caught immediately and are appropriately treated ⁞ Emergency Medical Services for Children (EMSC) "Pediatric Med Control" lines should be utilized when usual consult doctors cannot be reached ⁞ When providers/agencies are called for a consult and are unavailable, they should refer the caller to another provider/agency who could help and should have an established plan for who this would be ⁞ Sick babies and infants should be thoroughly examined because their appearance can be misleading or falsely reassuring ⁞ Improve and expand telehealth services and work towards having video conference for consults and emergencies ⁞ Improve the EMSC information so it is clear which numbers should be called for which types of cases
Undetermined (n=1)	Forensic interviews should be completed by either OCS or law enforcement for all children present in the home when another child has died ⁞ In the adoption study home process, the number of children and special needs of children should be strongly considered during placement

Note: Some recommendations are duplicated due to case similarity or common risk factors that resulted in the same prevention recommendation.

MATERNAL DEATHS (SEPTEMBER 2019)

- The committee reviewed 10 maternal deaths. Of these, the committee determined that 5 (50%) were pregnancy-related, 4 (40%) pregnancy associated but not related and 1 (10%) pregnancy-associated but unable to determine pregnancy-relatedness.

- Among the pregnancy-related deaths, 3 were due to cardiovascular conditions, 1 due to infection and 1 due to homicide.
- Among those pregnancy-associated, 1 was due to CO intoxiation, 1 was due to overdose, 1 due to homicide and 1 due to hypothermia.
- Maternal drug and alcohol abuse or substance use disorder contributed to 80% of these 10 maternal deaths.
- The review committee generated prevention recommendations for all 10 maternal deaths and determined all 10 deaths could have been prevented (100%).

Table 5. Prevention recommendations: Maternal deaths

Cause of death n = number of cases with recommendations	Committee Recommendations
Pregnancy-related (n=5) *Definition: Death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy.*	Increase access and availability to substance misuse treatment programs in rural areas ⁞ Hospitals discharging patients to rural areas should ensure the local clinic is aware of their return and schedule a follow up appointment for the patient prior to discharge, especially when patients have a history of failing to seek medical care ⁞ Increase home visiting services in rural areas
	Implement universal prenatal care insurance coverage ⁞ Increase community knowledge about stroke risk factors during pregnancy, stroke warning signs, and action needed when stroke warning signs occur ⁞ The state medical examiner's office (SMEO) should implement a specific maternal death autopsy checklist ⁞ The SMEO should request request placental pathologist review for deaths occurring during pregnancy
	Implement universal prenatal screening for substance use disorder using a validated screening tool ⁞ Improve access to preconception care for all women in Alaska ⁞ Expand public education about women's risk of heart attacks and how to detect the early signs of a heart attack ⁞ Increase community and provider's knowledge about the association of domestic violence and trauma as a prenatal stressor and its negative impact on pregnant women
	Implement universal prenatal screening for substance use disorders using a validated screening tool ⁞ Improve communities' recognition of postpartum stressors for women that may contribute to substance use, such as lack of child care, returning to workforce too early, or lack of financial resources ⁞ Providers should educate patients about resources and medications to treat alcohol dependence

	Improve communication between law enforcement and child welfare, as law enforcement are mandatory reporters and can make referrals when a family appears to need support that falls outside of law enforcement scope ⁞ Train Emergency Room staff and providers to recognize signs of domestic violence and child abuse as emergency rooms may often be the only point of contact with a medical provider for some high risk families ⁞ Ensure probation officers are trained to offer offenders the needed mental health and substance misuse programming and treatment options available even if the crime is not drug/alcohol related ⁞ Providers should include resources for fathers in the prenatal and postpartum period especially when mental health is a concern for the mother or both ⁞ Initiate a statewide domestic violence death review committee in Alaska ⁞ Improve training to medical providers to ask if the patient is experiencing domestic violence or feels safe with partner using a validated tool and prepare medical providers to offer solutions and resources ⁞ Expand home visiting services to all areas of Alaska ⁞ Increase access to free legal and for victim of domestic violence ⁞ Increase contraception access to women
Pregnancy associated (n=5) *Definition: The death of a women during pregnancy or within one year of the end of pregnancy from a cause that is not related to pregnancy.*	Include domestic violence education and its association to substance misuse in public health messaging ⁞ Parents and caregivers should educate children on home safety and establish rules preventing young children from answering the door ⁞ Recognize gun violence as a critical and preventable public health problem
	An agreement between law enforcement and cell phone carrier companies should be implemented to enable requests to turn on a person's phone to locate them via GPS during cases of emergency, specifically for cases when the client has not paid their phone bill and they are unable to reach emergency services
	Improve continuity of care and follow up for substance use treatment for a year after pregnancy between in-patient and out-patient provider offices ⁞ Implement statewide workgroup on perinatal substance misuse ⁞ Conduct more research on evidence based practices, multi-modal approaches and patient outcomes that have proven effective in the treatment of substance use disorder
	Implement universal screening for substance use disorder and postpartum depression using a validated screening tool ⁞ If primary care providers are prescribing anti-depression medication, they also should make a mental health treatment referral for counseling ⁞ Increase provider education about medication assisted treatment and increase the number of providers who have waiver training so they can prescribe addication treatment medication (ie: suboxone) outside of an in-patient setting ⁞ Providers should follow CDC guidelines for prescribing an opioid pain medication for patients with chronic pain

	Increase access to alcohol treatment programs, and improve screening for alcohol use and referral to treatment ⁞ Provider should flag charts for follow up if patients do not return for needed treatment/check/lab work to improve continuity of care, especially for non-compliant patients ⁞ The criminal justice system should make referrals to substance use treatment programs ⁞ Implement universal prenatal screening for substance use disorders using a validated screening tool

Note: Some recommendations are duplicated due to case similarity or common risk factors that resulted in the same prevention recommendation.

POSITIVE ACTIONS/INTERVENTIONS (JULY-SEPTEMBER 2019)

In 2019, MCDR began tracking if there were any notable positive elements in each reviewed case. These could be positive interventions or actions taken by family members, child welfare, healthcare entities, law enforcement, the state medical examiner's office and other entities involved in child death cases. It is important to continue to empower these systems by acknowledging and reinforcing positive actions and interventions.

Table 6. Positive Actions/Intervention

Infants and Children	
Category	**Notable positive element**
Family/Parents	• Mother received good prenatal care • Infant lived in a smoke free home • Parents were aware of safe sleep recommendations • The whole family received counseling after child died • The child was attending college • The child had someone in the community looking out for him • Child had good family support during cancer diagnosis and treatment • Family was involved and followed through with child's prescribed care plan. • Parent knew how to perform CPR
EMS/Police/ME	• Law enforcement did a thorough investigation and described infant's physical condition when first seen • Law enforcement completed a SUIDI form and attempted reenactment • Body cam footage and witness interviews were beneficial to the investigation and the death review • Fire investigators performed an extremely thorough investigation which lead to the identification of the cause of the fire • An investigation from Fire and Life Safety was performed

	• ME tested for CO when the decedent looked a little pink (good catch by ME) • Good interagency communication between Fire and Life Safety, ME and law enforcement • EMS responded quickly and provided good resuscitation
Healthcare Facility	• Pediatric Intensive Care Unit (PICU) was consulted while medically complex child was on the pediatric floor • Excellent communications between staff and documentation throughout the day • Code run very well • Recording on the code sheets was clear and well done • While communication between two medical systems could certainly have been improved there was communication at times • Child received high quality care despite adversarial interactions with family and patient • Child was diagnosed just days after first presentation • Amazing palliative care that basically provided hospice care • Child's wish for no treatment was respected and fully supported • Child with complex medical condition was appropriately returned to their home village • Resuscitation of baby was performed well in the hub hospital prior to medevac arrival
Child Welfare/ Protective Services	• Alaska CPS contacted an outside state CPS to notify them that this family was thought to be heading to another state and requested follow up with interviewing children following this child's death • Outside state CPS received an anonymous report notifying them that this family was in this new state and was fleeing from Alaska CPS

Maternal	
Category	**Notable positive element**
Family/Parents	• Decedent's partner knew CPR and initiated it immediately
EMS/Police/ME	• The search and rescue response was exceptional • All health care providers present (health aide, nurse, doctor, air ambulance crew) did everything they possibly could to re-warm and resuscitate decedent • The local police department did a thorough death investigation into the unclear circumstances surrounding decedent's death and interviewed many friends/acquaintances who had recently had contact with the decedent.

Healthcare Facility	• Decedent was receiving medication assisted treatment • A provider reviewed prescription drug monitoring program database before discharging the decedent. • Local clinic had narcan available • The clinic health aides performed their duties well throughout the resuscitation efforts • Decedent received a phone follow up from behavioral health after her discharge due to appearing distressed • Decedent accepted a referral from provider for behavioral health treatment • Rural provider responded quickly and provided all necessary care when decedent went into labor unexpectedly • The midwife who saw her on her first visit identified her high blood pressure and made a note to watch it • Decedent was screened for domestic violence during prenatal visits • The use of the pregnancy checkbox on the death certificate indicated improvement in data quality and resulted in identification of this case • Education on the risks of prenatal smoking were well documented in decedent's medical chart
Child Welfare/ Protective Services	• Shortly following the decedent's death, the children were interviewed at the Child Advocacy Center (CAC) and also received follow up therapy • All of the children were initially placed in the same foster home together even though it was a blended family • Child was interviewed by Child Advocacy Center (CAC) following decedent's death and the child was protected by OCS until it was established that the father was not involved in the death of the mother and it was safe for the child to return to his care • OCS made an appropriate placement of child following decedent's death • OCS ensured that the child had a safe plan of care prior to discharge after birth