MATERNAL AND CHILD DEATH REVIEW PROGRAM

2019 QUARTERLY REPORT & RECOMMENDATION SUMMARY (JANUARY - MARCH)

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

This report is limited to the deaths of children aged 0 to 17 years that were reviewed by the MCDR Committee during the first quarter of 2019 (January – March) (n=31). This report does not include information on maternal mortality as those deaths were not reviewed during this quarter. 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.

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.

A review meeting was held during this quarter to review 2018 deaths that occurred in a Neonatal Intensive Care Unit (NICU), which are described in the "Infants under 1 year of age" section of this report. Suicides are described within their own section as this is a priority area for prevention in Alaska. All recommendations generated by the committee are contained in this report for all 31 deaths reviewed during this quarter (both preventable and non-preventable).

INFANT DEATHS (UNDER 1 YEAR OF AGE) (JAN-MAR 2019)

- The committee reviewed 15 infant deaths. 2 deaths were due to unintentional injury.13 deaths were due to medical causes
- Of the 13 deaths due to medical causes, 9 (69%) were caused by congenital anomalies
- 1 death was classified as Sudden Unexpected Infant Deaths (SUID) by the MCDR committee using the Centers for Disease Control and Prevention (CDC) classification guidelines.
- 12 deaths occurred in the neonatal period. 3 deaths occurred in the postneonatal period.
- Of the 15 infant deaths reviewed this quarter, the review committee generated 12 recommendations, and determined that 4 cases could have been prevented (27%).

Table 1. Prevention recommendations: Infant injury deaths

Cause of injury *n = number of cases with recommendations	Committee Recommendations
Unintentional Asphyxia (n=2)	Continue safe sleep education to parents or caregivers (including risk reduction methods and avoidance of exposing infants to second hand smoke); Toxicology screening should be required for caregiver if there is a suspicion that abuse, neglect or exposure to hazards caused or contributed to the child death
	Continue safe sleep education (including risk reduction techniques and the dangers of drowsy/substance impaired breastfeeding); High risk infants should receive more proactive OCS interventions; Healthcare providers should offer family planning education and access to long-acting reversible contraceptives (LARCs) to this particular family; Toxicology screening for caregiver if there is a suspicion that abuse, neglect or exposure to hazards caused or contributed to the child death

Table 2. Prevention recommendations: Infant Medical/Undetermined deaths

Cause of death *n = number of cases with recommendations	Committee Recommendations
	Bereavement services should always be offered to families experiencing the loss of a child; counseling should be offered and adapted to the family's education level so that they can clearly understand the benefits of the plans being offered to them

Medical (n=10)	Genetic testing should be offered to all parents whose child died due to a congenital anomaly with genetic predisposition, and during all future pregnancies, in addition to starting early prenatal care with an ultrasound performed at 20 weeks
	Genetic counseling should be offered to parents whose baby has died of genetic disorder
	Family should receive kidney ultrasound and/or genetic screening for polycystic kidney disease to understand inheritance patterns for any future pregnancies
	Healthcare providers who serve high-risk women (history of depression, PTSD, substance abuse), should always discuss contraceptive methods and advise the most effective/protective contraceptive option; Mothers with significant substance abuse and BH issues who have experienced an infant loss-should receive bereavement support and any BH and substance abuse treatments available; implement a 24/7 pediatric EEG availability in the state to prevent delays and unnecessary transfers
	Bereavement services and behavioral health counseling should always be offered to mothers with difficulty coping with a child's loss; genetic testing should be offered to parents whose child dies of genetic disorder
	For future pregnancy, pre-conception counseling with genetic testing should be offered to parents whose child has died from genetic disorder
	Prenatal care resources/education should be offered to young pregnant women to encourage early prenatal care; each DV report against pregnant women should be taken more seriously; Women with a history of pregnancy complications, such as history of premature birth, or premature rupture of membrane should discuss planning healthy future pregnancies with their care providers
	Advise early and consistent prenatal care; advise maternal compliance with medications and prescribed care plans throughout pregnancy; advise all women wishing to become pregnant receive preconception counseling prior to trying to become pregnant; maternal mental health services and support for this specific mother; this mother should receive an early social work consult and get connected to all available resources as soon as possible if she becomes pregnant again
	Amniocentesis should be considered before placing a rescue cerclage; women who have cervical incompetence should consult a healthcare provider when not pregnant to determine the best type of cerclage (if any) for when she next becomes pregnant; providers should ensure good pericare is provided, especially when mothers are on bedrest

CHILD DEATHS 1-17 YEARS (EXCLUDING SUICIDE) (JAN-MAR 2019)

- The committee reviewed 15 deaths of children ages 1-17 years. 8 child deaths were due to injuries. 6 deaths were due to medical causes and 1 death was undetermined.
- Of the 15 child deaths reviewed this quarter, the review committee generated prevention recommendations for 9 cases and determined that 9 of the deaths could have been prevented (60%).

Table 3. Primary mechanism of Injury deaths

CAUSE OF INJURY	DEATHS
Motor Vehicle	5
Weapon	2
Poisoning, overdose	1
TOTAL	**8**

Table 4. Prevention recommendations: Child injury deaths

Cause of injury *n = number of cases with recommendations	Committee Recommendations
Poisoning, (n=1)	Increase teen awareness of the dangers of opioids and accidental overdoses; reduce the prescription of pain killers, especially opiates, by healthcare providers
Assault, weapon (n=1)	Increase resources for mental health services; improve mental health early intervention and follow-up for children classified as at-risk
Motor vehicle (n=3)	Helmets should be worn by children at any age whenever and wherever they ride all motorized vehicles; keys should always be removed, not only to prevent theft, but also for children likely to play with the motor vehicles; EMS should follow Alaska's new guidelines for trauma transportation in pediatric emergencies
	Always wear helmets when biking; increase bike helmet giveaway programs; always supervise young children while biking; provide parental education on bike and road safety; Department of Transportation should utilize road engineering techniques in areas where speeding is a problem
	Increase education of seat positioning recommendations and car/booster seat recommendations; always ensure children are wearing seatbelts; follow all driving laws

Undetermined (n=1)	Organize a media campaign to prevent abusive head trauma; provide home nursing services for children with complex medical needs; expand the respite care system; OCS should review their screen out procedure when non-parental caregivers reach out for help as a result of parental abandonment; healthcare providers should perform a pulmonary function test before stating that a child no longer needs BiPap; improve communication between medical examiner, law enforcement, medical providers, and OCS (Always involve qualified individuals, especially healthcare providers, when interpreting a medical exam finding which will help law enforcement to conduct a full and impartial child death investigation)

Table 5. Prevention recommendations: Child Medical/Undetermined deaths

Cause of death *n = number of cases with recommendations	Committee Recommendations
Medical (n=2)	Although this child did not die of the flu, he should receive the annual flu shots; children diagnosed with "pneumonia" should be treated with an antibiotic (e.g. Vancomycin) as soon as possible to have a better vital prognosis; rural health workers should be trained in the administration of antibiotics; supply rural areas with lifesaving antibiotics, especially antibiotics for H. influenza; provide continuing training to healthcare providers to properly intubate children with respiratory distress
	Develop anticoagulants that are easy to use especially for rurally located children with health conditions who require a daily anticoagulant or whose valves have been replaced; bereavement services should always be offered to families experiencing the loss of a child, even when the death is expected
Undetermined (n=1)	Provide additional training for officers on unattended death scene investigations; improve communication between OCS/law enforcement/medical providers; Medical providers should follow best practices as outlined by the AAP for writing orders, treatments, prescriptions and ensure a complete medical and social history is obtained

ADOLESCENT SUICIDE (JAN-MAR 2019)

- The committee reviewed 1 adolescent suicide death. The review committee determined that this death could have been prevented and generated prevention recommendation for this case.

Table 6. Prevention recommendations: Adolescent suicide

Cause of death *n = number of cases with recommendations	Committee Recommendations
Firearm (n=1)	Report all suicide deaths to OCS especially when there are other children in the home; utilize/develop a texting system for people to get "check in" texts when there is a delay in getting mental health services; continue campaigns and education on securing firearms; identify at-risk kids with limited social contacts and work to expand their social circles