Protecting Tomorrows:

Understanding and Preventing Maternal and Child Deaths



2024 Annual Report
of the Maternal & Child Death Review Commission
May 2025



A Report from

Delaware's Maternal and Child Death Review Commission

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Submitted to

The Honorable Matt Meyer, Governor

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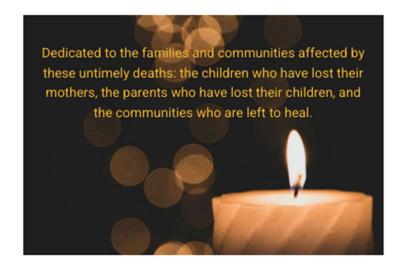


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Executive Summary

Delaware's Maternal and Child Death Review Commission (MCDRC; the Commission) is made up of six interdisciplinary teams who review the deaths of infants, children, and mothers to better understand how similar deaths could be prevented in the future. MCDRC investigated 103 deaths in 2024. Key findings and actions include:

Child Deaths—Child Death Review and Sudden Death in the Young (CDR/SDY):

- Among 46 child deaths, 12 were infant deaths and 34 were deaths of children aged
 1-17.
- Families who lost a child often faced multiple challenges like financial strain, unstable housing, domestic violence and mental or behavioral health issues.
- Eight sudden, unexpected infant deaths were linked to unsafe sleep environments (such as soft bedding or the baby sleeping somewhere other than a crib). In twothirds of cases related to unsafe sleep environments, the adult caregiver at the time of death was impaired by alcohol, marijuana or other drugs.
- The Cribs for Kids (C4K) program, promoting safe sleep environments, expanded significantly, engaging partners throughout the state.
 - C4K staff distributed 373 cribs, a 12% increase from the prior year.
 - Nine trainings on infant suffocation prevention were held to onboard new C4K partners, helping to ensure that safer sleep environments reach more communities statewide.
- What's Next: The MCDRC will focus on expanding safe sleep education and providing more safe sleep environments (Pack n' Plays) in communities facing higher risks of child deaths.

Stillbirths and Infant Deaths—Fetal and Infant Mortality Review (FIMR):

- o Among 48 cases of this type, 50% were stillbirths (fetal deaths).
- Delaware's FIMR team was able to review cases in almost real-time, with only a fivemonth lag between death and review.
- One in three FIMR cases involved difficulties and delays in a mother accessing prenatal care.
- Delays in accessing prenatal care and receiving care across different sites affected women's ability to recognize and manage pregnancy complications.
- What's Next: Recommendations include enhancing care coordination services across various sites where women enter healthcare, training more healthcare

providers to ensure access to on-time prenatal care, and encouraging women who experience a loss to follow up early for postpartum checkups.

Maternal Deaths—Maternal Mortality Review (MMR):

- Nine maternal death cases were reviewed in 2024.
- Overdose deaths remain the leading cause for a fifth consecutive year, often involving the overlap of mental health conditions, substance use disorder and social risk factors.
- Women who died during and after pregnancy often had many significant stressors such as unstable housing, domestic violence and traumatic experiences in their life.
- What's Next: Recommendations emphasize the importance of care coordination with follow up whenever and wherever women access care and the importance of providers having a non-judgmental, consensual discussion of harm reduction strategies with women dealing with substance use disorder (SUD).

Community Action:

- The Community Action Team (CAT) discussed findings from review teams to set its project priorities. Supporting pregnant and postpartum women with SUD and accessing care coordination were the two issues that emerged as both highest priority and actionable.
- The Commission convened two public meetings to share its findings and recommendations from prior years with stakeholders and community members.

Grant Funding:

- The MCDRC has successfully obtained grants from the Centers for Disease Control and Prevention (CDC) and the National Center for Fatality Review and Prevention to better engage families in outreach efforts and to partner with community members through the CAT.
- While the Commission is required by Delaware law to investigate all maternal deaths, there is no state budget support for this work. Grant support from the CDC is instrumental in maintaining staff to conduct MMR.





Introduction

Every child and family hold tremendous promise. Protecting health and well-being is fundamental to the values we share in Delaware. When untimely deaths occur, they represent not only a tragic loss but also a call to action.

The Maternal and Child Death Review Commission (MCDRC; the Commission) seeks to learn from the loss of infants, children, and mothers in Delaware, meticulously examining fetal, infant, child, and maternal deaths to uncover preventable causes. This work is driven by the knowledge that we have the ability to safeguard lives and foster healthier futures. The work of Delaware's maternal and child health partners has already made a remarkable difference: between 2000 and 2021, the state achieved a 36% decrease in infant mortality. By continuing to study the circumstances surrounding maternal and child deaths, we can strengthen support systems, address unfair and uneven conditions that can complicate pregnancies and births, and ensure that every child and family gets a strong, healthy start.

This report shares what the Commission has learned in its review of deaths in 2024. The findings show that we can prevent most maternal deaths, significant social stress puts families at risk for untimely deaths, and providing extra support to these families at highest risk can help them take care of themselves and their children for the most productive and healthy lives possible. This knowledge calls us to take continued action to reduce these avoidable deaths and their ripple effects on our communities.

This report unfolds in five parts:

- Key developments in the Commission's work during 2024
- Findings and recommendations from review of child deaths and sudden deaths in the young
- Findings and recommendations from review of stillbirths and infant deaths
- Findings and recommendations from review of maternal deaths
- Appendices with more details, data, and definitions



¹ Delaware Health Statistics Center. *Delaware Vital Statistics Annual Report, 2021*. Delaware Department of Health and Social Services, Division of Public Health: 2024.

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Key Developments

While the work of preventing maternal and child death in Delaware is well-established and ongoing, 2024 was a year that involved new perspectives and important advancements.

Building on the lessons and successes achieved, the Commission increased its focus on working closely with maternal and child health partners, bringing more partners to the table, increasing the cadence of interaction, and deepening efforts undertaken in partnership. This increased collaboration is necessary to make faster progress on issues that cause higher rates of preventable deaths in lower-income communities, rural communities, and communities of color.

Partnerships in Action

The Commission values and continues to work with its long-time partners to review cases, reveal opportunities for prevention and act on recommendations. Review teams that carefully consider each death are made up of dedicated partners in medicine, nursing, behavioral health, public health, insurers, social work, education, child welfare, forensics, law enforcement, and community advocacy. The Commission's Community Action Team (CAT) also engages more public and community partners to interpret and act on recommendations from the review teams. The Delaware Healthy Mother and Infant Consortium (DHMIC) and the Delaware Perinatal Quality Collaborative (DPQC) do important work to improve community-based and clinical care for women and infants. More partners and more collaboration are needed to do this work and bring everyone along.

National Funding to Conduct Thorough, High-Quality Reviews

The Commission had support from three federal grants to conduct its work in 2024. For high-quality reviews of sudden child deaths, funding from the Centers for Disease Control and Prevention (CDC) enables Delaware to participate in the Sudden Unexplained Infant Death (SUID) and Sudden Death in the Young (SDY) case registry. CDC support through the Enhancing Reviews and Surveillance to Eliminate Maternal Mortality (ERASE-MM) grant funds dedicated staff to review maternal deaths and funds all initiatives and activities of the CAT to implement recommendations for improving maternal and infant health. In addition, a new grant from the National Centers for Fatality Review and Prevention allowed for more focused support to strengthen the Fetal and Infant Mortality Review (FIMR) program's ability to contact mothers, request an interview and support them with bereavement resources.

Child Deaths and Sudden Deaths in the Young

The 2024 review of 46 child deaths and sudden deaths in the young represent a diverse set of circumstances and causes. These reviews are a crucial process to reveal opportunities for prevention and improving care for families.

Noteworthy findings include:

- Most infant sleep-related deaths occurred when the adult caregiver was impaired by alcohol, marijuana or drugs. Two-thirds of the sleep-related deaths involved an impaired caregiver, which represents an increasing trend and an opportunity for better preventive guidance.
- Chronic health conditions contributed to many child deaths in Delaware. Twenty cases (43% of deaths) involved children with chronic health conditions, and all but one died of natural causes.
- Families who lost a child were typically facing many serious yet addressable stressors. Financial strain, overcrowded or unstable living arrangements, domestic violence, incarceration and substance use in the family, and difficulty accessing health care were among the factors that were commonly faced by families who lost a child.
- Homicides were slightly down from their Covid peak, but victims ranged in age from
 infants to teens. Over the past five years of review, almost half of homicide cases could
 not be brought before the Child Death Review team due to unresolved prosecution status.
 This impedes the full review of homicide deaths and limits findings and recommendations
 that can be made in such cases.

Based on these findings, the MCDRC recommends these priorities:

- To prevent infant sleep-related deaths, we recommend refining our successful models of outreach to engage more SUD treatment programs and recovery residences as partners to promote safer sleep.
- 2. To more thoroughly review homicide deaths with a lens of prevention, we recommend a change in the Commission's statute to allow panel review pending prosecution decisions.
- To better understand trends in youth suicide and homicide deaths, we propose a multiyear analysis on each topic as numbers in any given year are too small to draw actionable conclusions.

More detail on these findings, the analysis behind them, and the resulting recommendations follow.

Continued Funding for Important Work

In 2024, the MCDRC was supported by funding from the CDC to participate in the Sudden Unexplained Infant Death (SUID) and Sudden Death in the Young (SDY) case registry. This funding enables the Commission to conduct investigations in keeping with rigorous national standards and contribute data to national statistics and research that may uncover ways to prevent sudden deaths in the future.

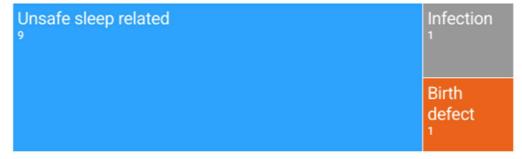


Cases Reviewed

In 2024, multidisciplinary teams including pediatricians, child welfare professionals and forensic examiners, reviewed 46 infant and child death cases. Reviews included 11 cases in which a child (ages 0-17) died suddenly and without an immediate explanation (Sudden Death in the Young/SDY review). The Child Death Review (CDR) team examined an additional 35 cases in which the manner of death was homicide, suicide, natural and sometimes accidental. Figures 1 and 2 provide more details on the causes of death reviewed by the SDY and CDR teams. Reviews sought to answer key questions about what happened and why, so that in similar circumstances in the future, we can take steps to avert child deaths. For more detail on how cases are assigned to either a SDY or CDR team, see Appendix B.

Figure 1: Most sudden child deaths occurred in the first year of life and in an unsafe sleep environment

2024 SDY cases: underlying cause of death (n=11)



Motor vehicle collision

Motor vehicle collision

Suicide

Suicide

Cancer

Asphyxia (accidental)

Other medical

Neurological

Neurological

Figure 2: The Child Death Review (CDR) team reviewed a variety of cases that differed in circumstance and cause or manner

Patterns in the Data

To inform effective programs and partnerships, the Commission carefully analyzes the data to spot patterns related to specific populations and the factors affecting their health. By pinpointing community-specific challenges, child health partners can work with affected communities to develop approaches that meet the community's needs. This helps to ensure that all children and youth in Delaware, no matter their background, have a full and fair opportunity for health and wellbeing.

A closer look at the data by geography, race, ethnicity, and other demographics spotted important patterns:

- Looking county-by-county, Kent County was over-represented in CDR and SDY cases.
 Among cases reviewed in 2024, 33% of them involved children who lived in Kent County,
 however only 20% of the state population of children under 18 live in this county.
- Families who lost a child were typically facing many serious yet addressable stressors. Financial strain, overcrowded or unstable living arrangements, domestic violence, incarceration and substance use in the family, and difficulty accessing health care were among the factors that were commonly faced by families who lost a child. (For more details see the 2024 Annual Report Data Addendum.)

- Families who are Black faced a higher risk of losing a child unexpectedly.² In 2024, Black children made up 46% of CDR/SDY cases in Delaware. This represents an increase from 35% in 2023 and exceeds their proportion (25%) of the state's total child population.³
- The most common ages of child death varied by race/ethnicity. The number of cases was highest in infancy, followed by young children (1-4 years old) and older adolescents (15-17 years old). However, Black children experienced a higher-than-expected number of deaths under the age of 5. White youth experienced the highest number of deaths in late adolescence. See the 2024 Data Addendum for more detail.
- The manner of death varied by race/ethnicity. White youth made up most cases of accidental deaths. Black youth accounted for more natural deaths, sleep-related deaths and homicides.



² The term Black refers to persons who have a single race identified as Black and are non-Hispanic. See the glossary in Appendix D for definitions of terms to describe subpopulations by race and ethnicity.

³ Kids Count Data Center. Child Population in Delaware, 2019-2023. The Annie E. Casey Foundation. Accessed at: https://datacenter.aecf.org/data/tables/10056-child-population?loc=9&loct=5#detailed/5/1847-

^{1849/}false/2606,2543,2454,2026,1983,1692,1691,1607/213/19451,19452 on Feb 25, 2025.

⁴ The term White refers to persons who have a single race identified as White and are non-Hispanic. See the glossary in Appendix D for definitions of terms to describe subpopulations by race and ethnicity.

Infants' Sleep Environments and Safety

Sleep environments are an important but complex topic in infant health. Sleep is a basic human need, and both babies and their adult caregivers need rest. Yet many factors can affect the sleep environment for everyone in a home with a new child. During the first year of a baby's life, many aspects of a family's life may be in flux: the daily (and nightly) schedule; the health status and needs of mother and child; the family's income and expenses; relationships among parents, siblings, and extended family members; and the living and sleeping arrangements in a home. All of these add pressures that can affect safety. In addition, caregivers may not always be aware of recommended safety practices or may be living in circumstances that don't support best practices. Most times, when a parent falls asleep on the couch with an infant or puts a toy in the child's crib, there are no negative consequences - but sometimes, there are. Delaware has experienced a longstanding issue with infant deaths related to unsafe sleep environments, averaging one loss each month.

What Reviews Revealed

The Commission carefully reviews every unexpected infant death in Delaware and identifies any and all elements of the sleep environment that could have posed a

Sleep Related Insights at a Glance

Most sudden, unexpected infant deaths were linked to unsafe sleep environments (such as soft bedding or the baby sleeping somewhere other than a crib).

Delaware has experienced a longstanding issue with infant deaths related to unsafe sleep environments, averaging one loss each month.

Families who lost a baby in unsafe sleep conditions were often facing other forms of serious stressors, including living in a crowded home or in a home that was not their own.

Black families are disproportionately more likely to lose a child in an unsafe sleep situation.

In two-thirds of unsafe sleep deaths, the adult caregiver was impaired by alcohol, marijuana or drugs when they fell asleep often next to the baby.

The Cribs for Kids program, promoting safe sleep environments, expanded significantly, engaging partners throughout the state.

What's Next: The MCDRC will focus on expanding partnerships among SUD treatment providers to provide safe sleep education and more safe sleep environments (Pack n' Plays) for families facing higher risks of child deaths.

risk to the child. In cases when the cause of death was undetermined initially, thorough review of the information available reveals that most of these infant deaths were due to suffocation or an unsafe sleep environment. Most often, reviews found that infants were sleeping with soft bedding and toys, on an adult bed or couch, or with other people. All of these factors increase the risk of suffocation. Figure 3 details the risks noted in children's sleep environments at the time of death and compares them to how often they generally occur.

Figure 3: Risks in infants' sleep environment

In many cases of death involving unsafe sleep, more than one of these risk factors were present.

	Risk in baby's sleep environment	General percent of infants in Delaware*	Percent of sleep-related infant deaths
	Not in crib, bassinette or side sleeper	10%	78%
•	Not sleeping on back	21%	22%
	Unsafe bedding or toys near infant	6%	89%
(S)	Sleeping with other people	22%	56%
* 1	Intrauterine drug exposure		56%
1	Tobacco use: mother	12%	60%
ÖÞ U	Adult was drug or alcohol impaired at time of death		67%

^{*}According to 2022 data on infant care practices among women who delivered in Delaware. Data collected by DPH Pregnancy Risk Assessment Monitoring System (PRAMS). Data accessed through personal communication with George Yocher. See 2024 Data Addendum for more details on PRAMS survey questions.

While the number of unsafe sleep-related deaths fluctuates a bit from year to year, this issue has been a longstanding one in Delaware with one infant dying each month, on average, from this preventable cause. Figure 4 shows the number of unsafe sleep deaths occurring each year for the last nine years.

Figure 4: Number of Unsafe Sleep-Related Deaths by Year of Occurrence

*Some 2024 cases are pending review, so numbers are subject to change and will be included in future reporting.



Providing a Safe Sleep Option for Families: Delaware's Cribs for Kids Program

For families who need a safe sleep option for their infant and meet criteria, the Delaware Cribs for Kids program provides free Pack N' Plays through a network of partnering agencies across the state. Cribs for Kids staff trains agencies to educate families on infant suffocation prevention. In 2024 nine trainings were conducted to onboard new partners. Just over 370 cribs were distributed by new and existing partners. In light of the high prevalence of unsafe sleep deaths that occur when an adult caregiver is impaired by alcohol, marijuana or drugs, the Commission is developing a more targeted approach to outreach and trainings in 2025.



What can we do: Support families at higher risk for infant unsafe sleep MCDRC staff will refine the Cribs for Kids outreach strategy to develop a plan for more consistently engaging potential partners in SUD treatment and residential recovery. The goal in 2025 is to establish contact with 10 SUD programs and conduct trainings at two of them.

Youth Homicides

About one child is a victim of homicide every other month in Delaware, that is about 5-10 deaths each year. Figure 5 shows the count of youth homicides over the last eight years and the notable spike around the time of the Covid lockdowns. Though the number of youth homicides has decreased from the Covid peak, this past year of reviews involved cases ranging in age from infants to teens. Few conclusions can be drawn from a single year of review, so the MCDRC staff will conduct a multiyear analysis looking into the circumstances surrounding youth homicides to help inform prevention efforts. This analysis will be released later in 2025.

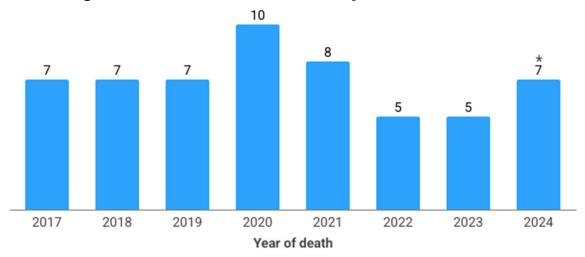


Figure 5: Number of Youth Homicides by Year of Occurrence

*Some 2024 cases are pending review, so numbers are subject to change and will be included in future reporting.

While all homicides reported to the Commission are counted in Figure 5, full reviews of the deaths have only occurred in about half of the cases. This is because the laws governing the MCDRC prevent a full team review until a decision is made on whether a case will be prosecuted in court or not. If this prosecution decision drags out over two years, the Commission staff administratively closes the case. The case is entered in the database and counts towards the statistics, but findings on opportunities for prevention or improving programs for families cannot be made without a team's input. Prosecution decisions preclude many homicide cases and unsafe sleep-related cases from being reviewed by the CDR or SDY teams. MCDRC staff is working on gathering the data to convince lawmakers to change this so that all types of cases can get a more timely and complete review.

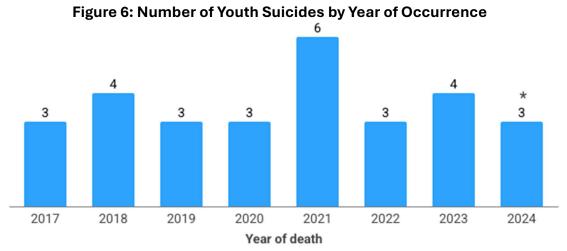
What can we do: The case for change

MCDRC would like to explore with the Department of Justice if legislation or policy changes can address the barriers that exist to conduct reviews of cases with pending prosecution. This will allow more complete consideration of all manners of cases and in a timelier fashion to identify systems opportunities for prevention.

Youth Suicides

Good mental health is a platform for a full, healthy, productive life – and it matters at every stage of life. In adolescence – the period between 10 and 25 – young people's sense of belonging, connection, and emotional well-being allows youth to learn, thrive, and grow into their identities and their place in our communities. Many factors influence mental health – and cause or compound mental health challenges and serious mental illness. Youth suicides peaked after the

Covid pandemic as seen in Figure 6. While numbers have returned to the pre-pandemic level, all suicide deaths are a tragedy and point to ways we can potentially better support young people.



*Some 2024 cases are pending review, so numbers are subject to change and will be included in future reporting.

In 2024 the review of suicide deaths by the CDR team revealed an opportunity for better communication between mental health providers, pediatricians and school health staff. The recommendation below mirrors the theme of care coordination seen in reviews of other infant and maternal deaths. As youth suicide numbers in any given year are small, to learn more from these deaths, the MCDRC staff will look over multiple years to analyze data for patterns. A separate analysis will be released later in 2025 to shed more light on risk and protective factors affecting youth mental health.

What can we do: Better coordinate care for youth mental health

In-patient psychiatric providers should communicate with a child's primary care physician and outpatient mental health providers to establish a follow up plan of care for the child prior to discharge.

Child Abuse and Neglect

Protecting children who are victims of child abuse and neglect is a critical task of our state and local agencies. The MCDRC works closely with the Child Protection Accountability Commission (CPAC) to review the systems in place to protect children from harm and identify opportunities to strengthen them. In 2024 nine child deaths involving suspect abuse and/or neglect were jointly reviewed with CPAC's Child Abuse and Neglect Panel. This team has different kinds of experts to review these cases thoroughly. Findings and recommendations from these cases, along

with other cases of serious injury due to child abuse and neglect, are reported out in the <u>2024 CPAC</u> annual report. This report highlights CPAC's ongoing work to:

- Conduct on-going trainings to ensure first responders know the most up-to-date guidance for responding to reports of child abuse and neglect
- Identify opportunities for improving the response and investigation protocols for cases of suspected abuse and neglect
- Monitor the impact of legislative initiatives on dependent, neglected and abused children, and
- Support young adults who transition out of foster care.5

In addition, a Joint Action Plan is developed collaboratively by the MCDRC and CPAC every two years to guide efforts to improve the systems in place to protect children. Both Commissions regularly review progress made towards the goals set forth in the Joint Action Plan.



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⁵ Child Protection Accountability Commission. Fiscal Year 2024 Annual Report. Accessed at https://my.visme.co/view/8r6009jq-fy24-cpac-annual-report#s1 on May 13, 2025.

Stillbirths and Infant Deaths

In 2024, 48 stillbirths and infant deaths were reviewed by the Fetal and Infant Mortality Review (FIMR) program. Most of these cases represent women who had serious pregnancy complications resulting in a stillbirth or premature delivery. FIMR cases provide key insights on how women with pregnancy or medical complications are cared for, and what can be done to improve the care of high-risk women for better pregnancy outcomes.

Noteworthy FIMR findings include:

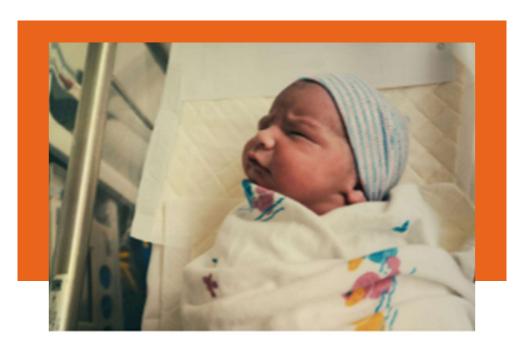
- Reviews occurred just a few months after the death, uncovering the most up-to-date
 insights and current trends being experienced by women who suffer a pregnancy loss.
 There are few programs in the state that provide such timely information on the experiences
 of pregnant women. Even statewide statistics on births and deaths do not come out until
 years later.
- The most common cause of infant deaths was prematurity, the baby being born too early. Extremely premature infants are at the greatest risk of death, and many infant deaths were babies who were born under 24 weeks gestation (six months) and weighing under one and a half pounds.
- Identifiable causes of stillbirths continue to be more commonly linked to problems
 with the umbilical cord, placenta or cervix. Obstetric complications are the most
 commonly identified cause for a stillbirth. In a few cases, a birth defect is the suspected
 cause.
- Access to timely prenatal care varies significantly by county, site of care and
 insurance. Two-thirds of mothers in Kent County (67%) had late or no prenatal care
 compared to 16% of New Castle mothers. Clinic patients and those on Medicaid were also
 more likely to have late or no prenatal care.
- One-fourth of women who experience a loss do not attend a postpartum visit. Follow up care, also called interconceptual care, is particularly important for women who are at highest risk in their future pregnancies for another loss or serious medical complication because they have had a prior stillbirth or infant death.

Based on these findings, the MCDRC recommends these priorities:

- 1. To help women who have physical, behavioral and social health needs, we recommend more healthcare sites employ care coordinators who can help patients navigate the health care system and find community-based supports to meet their needs.
- To increase access to on-time prenatal care, we recommend Delaware invest in more training programs for healthcare providers particularly nurse midwives and Women's Health Nurse Practitioners, professionals who can serve women throughout their reproductive years in a holistic way.

3. To increase follow up after a pregnancy loss, we recommend healthcare providers counsel women on the importance of an early postpartum visit and recognize their unique needs to heal their physical, mental and emotional health.

More details on these findings, the analysis behind them, and the resulting recommendations follow.



Cases Reviewed

In 2024 multidisciplinary teams including nurses, women's health providers, social workers and geneticists reviewed 48 cases of stillbirths (also known as fetal deaths) and infant deaths. Nine of these cases included a maternal interview which added meaningful detail about the mother's story of her pregnancy, health care, delivery experience and postpartum. The time between the occurrence of a death and case review was about five months on average, so the information from cases represents women's recent experiences with the health care system.

Half of the FIMR cases were infant deaths. These deaths were overwhelmingly due to the baby being born early and the resulting complications of prematurity. One-quarter of infant deaths occurred in the first day of life. Figure 7 provides details on the causes of infant deaths.

Stillbirths made up the other 24 cases reviewed. Figure 8 gives details on the underlying cause of stillbirths determined by the review team. In one-third of cases, the team could not identify a specific cause of death based on the information they had available. When they could decide on a cause, problems with the umbilical cord, placenta, cervix or a birth defect were among the underlying reasons identified for stillbirths.

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⁶ A stillbirth is when a baby dies inside the uterus and does not have any signs of life at delivery. For a full glossary of terms used in this report, see Appendix D.

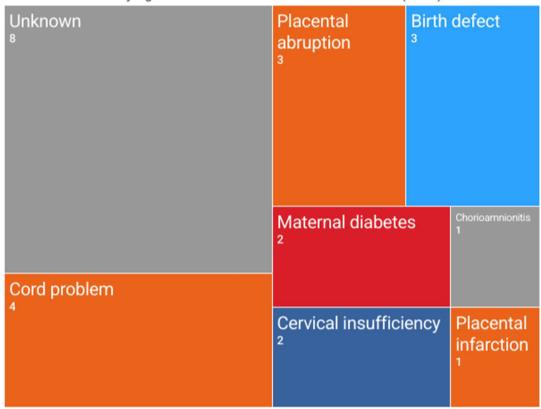
Figure 7: Most infant deaths were due to the baby being born extremely premature

Underlying cause of death in 2024 infant cases (n=24)



Figure 8: Sometimes the reason for a stillbirth cannot be determined based on the information available

Underlying cause of death in 2024 stillbirth cases (n=24)



Patterns in the Data

FIMR uses a national database to guide the careful review of each case. The team tries to get as full a picture as possible of what happened to the mother during and after her pregnancy based on the available information. When a maternal interview is available, the information is much more complete and helpful to understand the mother's experiences, her challenges, stressors and any helpful resources that allowed her to get the care she wanted or needed.

Pulling together the data from the 48 cases and tracking trends over several years of reviews identify some important patterns in the 2024 group of cases⁷:

- Access to timely prenatal care varies significantly by county, insurance and site of
 care. Two-thirds of mothers in Kent County (67%) had late or no prenatal care compared to
 16% of New Castle mothers. Clinic patients and those on Medicaid were also more likely to
 have late or no prenatal care. See Figure 9 for more details on the factors associated with
 barriers to prenatal care.
- Complications during pregnancy continue to be common when an infant death or stillbirth occurs. Preterm labor, cervical insufficiency, chorioamnionitis (an infection of the placenta) and premature rupture of the membranes are some of the more common complications associated with a loss.⁸
- Screening and management for the risk of preeclampsia was high, and prevalence of deaths due to preeclampsia declined for the second year in a row. Preeclampsia is a pregnancy-specific condition where the blood pressure rises significantly, often with other symptoms like protein in the urine, swelling, or damage to other organs. Preeclampsia can lead to serious complications for both the mother and baby, including seizures (eclampsia), organ damage, and even death. With screening, early detection, and medical management, however, these risks can be significantly reduced. 2024 FIMR cases reveal that more women were appropriately screened for their risk of preeclampsia and counseled to start on low dose aspirin, a win for the DPQC initiative to make this a standard of care. Over 90% of women were screened for the risk factors associated with preeclampsia and educated on the benefits of low dose aspirin to reduce their risk. The use of low dose aspirin during pregnancy for women at risk of preeclampsia is a DPQC clinical initiative to standardize care and ensure all pregnant women have access to this effective treatment.9
- The rate of postpartum visit attendance has not improved, with one-fourth of women not coming back to their obstetric provider after their loss. In the 2024 FIMR cases, just over half (53%) of mothers were seen in the first three weeks after delivery. This helps set a baseline for a new DPQC initiative to get more women in early for follow up after delivery.

⁷ For additional details, see Appendix A: Key 2024 Facts and Figures and the 2024 Annual Report Data Addendum.

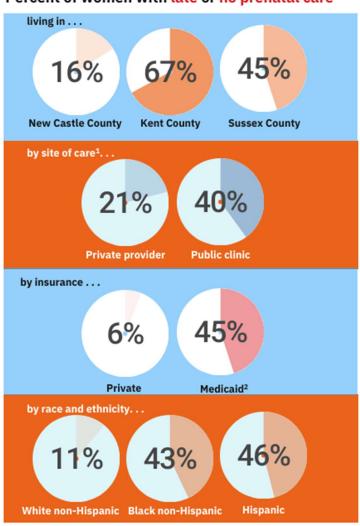
⁸ For more details, see the 2024 Annual Report Data Addendum.

⁹ For more details, see the 2024 Annual Report Data Addendum.

- Evidence of fetal movement tracking education (Fetal Kicks Counts for example)
 continued to decline. Only one in every three mothers (33%) who made it beyond 23
 weeks gestation, the stage of pregnancy when fetal movement tracking is recommended,
 received education on how to do it.
- In 2024 many more mothers who experienced a loss were foreign born. There was a doubling of Hispanic mothers among the cases reviewed. Just over half of Hispanic mothers were immigrants. Hispanic mothers made up almost half (42%) of stillbirth cases. There was also a much higher proportion of infant deaths involving Black women, and several of them were immigrants. 10

Figure 9

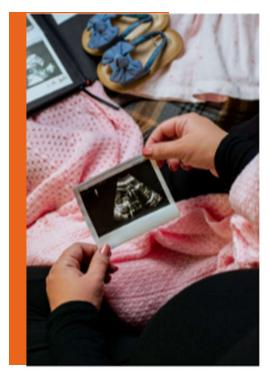
Percent of women with late or no prenatal care



¹Refers to women who were late to enter prenatal care only ²Refers only to women insured by a Medicaid MCO, not those with emergency labor and delivery coverage

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¹⁰For more details, see the 2024 Annual Report Data Addendum.



What Reviews Revealed: from Findings to Recommendations

Reviewing the findings and data from all the 2024 cases, the FIMR team identified six priority recommendations that they felt could improve care for mothers and babies and potentially prevent future losses. These recommendations are included here along with some of the reasons why they are important.

Care Coordination

Women who experience stillbirths and infant deaths, particularly when prematurity is present, often have multiple pregnancy-related, behavioral health and social issues that impact their overall health. The FIMR team often identify pregnancy complications such as preterm labor, cervical insufficiency, placental abruption, chorioamnionitis and premature rupture of the

membranes as contributing to the loss. Such complications in the woman's health, as well as a diagnosis that affects their baby directly, is stressful for the pregnant mother, leaving her and her family to process a lot of medical information in a very short amount of time to make decisions that affect her baby's survival. Many women (40%) have a history of mental health conditions going into their pregnancy, and about one-third have symptoms of postpartum mental health issues after the loss. In addition, multiple life stressors, history of abuse—including domestic violence—social chaos and financial concerns are not uncommon, adding to the mother's overall stress and ability to cope.

While these multiple stressors and risk factors are real, there are resources in Delaware that can help support a pregnant woman navigate through the health system and get to the providers who can help her. Care coordination is a service that can be offered by a nurse, social worker, community health worker, peer support specialist or another allied health professional to help a woman understand her options for care and then access them. Indeed, many FIMR strengths identified by the review team had to do with women who received care coordination and as a result got to specialty care, social support services or another site to meet a health need. All FIMR care coordination strengths identified involved cases where the woman was being seen in a clinic for prenatal care. Clinics often have more types of healthcare staff such as social workers, case managers and peers that can provide care coordination. Based on these strengths, the FIMR team felt it would be beneficial to expand care coordination to reach more pregnant women in Delaware. Programs that are being underutilized were also noted, namely the care coordination services offered through Medicaid insurers (managed care organizations/MCOs). Another underutilized service among women who experience a loss is the evidence-based home visiting programs which can follow a woman throughout her pregnancy and up to several years after.

These findings, strengths and the multiple issues facing women who experience a loss convinced the FIMR team to prioritize several recommendations to promote better access to care coordination services.

What can we do: Educate families about care coordination

MCDRC recommends that the CAT, Mediciad MCOs and community-based organizations work on tailoring community education materials to promote care coordination: what it is and how it can be of benefit to pregnant and postpartum women.

What can we do: Facilitate social service and community resource referrals

To increase availability of social service referrals, the MCDRC recommends women's health clinics and birthing facilities have a staff member trained to make referrals supporting social needs. Commonly accessed programs in the perinatal period include WIC, Medicaid, evidence-based home visiting and Medicaid MCO care coordination services.

What can we do: Reimburse for evidence-based home visiting services
The MCDRC supports Delaware Medicaid and Medical Assistance's (DMMA)
efforts to reimburse for evidence-based home visiting services such as Nurse
Family Partnership, Healthy Families Delaware and Parents as Teachers.

What can we do: Streamline Medicaid MCO care coordination referrals
The MCDRC supports the efforts of the DMMA and Medicaid MCOs to streamline a
single-entry referral process for all MCO-based care coordination services,
regardless of the specific MCO to which a person belongs, and educate providers
on the referral process.



Timely and high-quality prenatal care

Access to Care

Care coordination is also a priority issue based on the review of maternal deaths

The Maternal Mortality Review (MMR) team also identified care coordination as a priority issue based on their review of nine cases in 2024. Their recommendations take a slightly different angle on the issue with the identification of the Emergency Department as an important point of access to reach high-risk women and the role of a more clinical nurse navigator to address the special needs of women immediately after delivery. See page 30 to read more about the MMR recommendations on care coordination.

is important to ensure women are as healthy as possible during pregnancy. Prenatal screens and tests can detect many pregnancy complications early and monitor the growth of the baby in the uterus. Regular prenatal visits are an opportunity for women to get information and ask questions. Lack of access to prenatal care increases the risk of complications for the mother and baby. In an analysis of Delaware FIMR data, women who did not get prenatal care were at particular risk for stillbirths: 12% of stillbirths reviewed in a three-year period happened in cases where the mother had no prenatal care compared to 4% of infant deaths with no prenatal care.

A trend seen in the review of stillbirths and infant deaths is that many women are having difficulty accessing prenatal care in their first trimester of pregnancy. For the second year in a row, one out of every three FIMR cases involved women who entered care late—that is in the second or third trimester--or not at all. Case findings provide insights on the challenges women face getting into care. Geographical differences in access to care, as well as differences based on the site of care and insurance status are notable (Figure 9 above). For more details on the findings and data related to access to care, see the "FIMR: Continuity of Care" section of the 2024 Annual Report Data Addendum.

One major constraint in accessing prenatal care is the limited number of obstetric providers taking new patients, especially in Southern Delaware. A good option for holistic, high-quality care is that provided by nurse midwives, professionals who are trained in nursing and midwifery and can care for women throughout their reproductive years. For this reason, the FIMR team deemed the establishment of a nurse midwifery training program in Delaware a high priority.

What can we do: Increase professional training programs

To increase the training and expertise of health care professionals in Delaware, the MCDRC recommends that the Division of Public Health (DPH), educational institutions in Delaware and other state agencies support the creation of a nurse midwifery school in Delaware that gives priority to in-state residents.

Interconception Care

Women who have suffered a stillbirth or infant death are particularly vulnerable to emotional and physical problems after their delivery. As many of these deaths are associated with pregnancy complications, the road to healing can be long and difficult. Many women are left with unanswered questions about what happened to their baby and why. Their loss may have implications for their physical health in any future pregnancy. Their loss is also a big risk factor for postpartum depression, anxiety or posttraumatic stress disorder.

The interconception period, the time between pregnancies, is an important one for women to recover from the last pregnancy, grieve the loss of their baby and heal their physical, mental and emotional scars as best as possible. Women who have had a loss are a high priority for follow up care and counseling in this time between pregnancies. Yet many FIMR cases show us that women are not getting the care and counseling they may need in the interconception period. Almost 25% of women who have had a loss do not attend a postpartum visit. As a result, the women may not get some of the results from tests done around the time of the delivery, tests which may hold some answers to why their baby died. The postpartum visit is an important opportunity for the provider to go over what happened in the last pregnancy and make a plan to help the mother recover as much as possible prior to another pregnancy.

The DPQC is working on an initiative to encourage all women who deliver to follow up early for a postpartum checkup within three weeks. Right now, only half of mothers with a loss are being seen early.

What can we do: Develop clinical pathways for interconception care following a pregnancy loss

The MCDRC recommends that DPQC materials to promote the 4th trimester/interconception care and early postpartum safety check include materials appropriate for women who have experienced a pregnancy loss. Clinical protocols should acknowledge these women's high risk in future pregnancies and provide extra supports for bereavement counseling and interconception services.

Maternal Deaths

The health of women is important to a healthy, thriving society. In 2024 the Delaware Maternal Mortality Review (MMR) team considered nine cases of maternal deaths, also known as pregnancy associated deaths.¹¹

Noteworthy findings from these reviews include:

- Overdose continues to be the most common cause of death reviewed by the MMR team. Many women who were struggling with substance use disorder (SUD) also had a serious mental illness and social risk factors such as unstable housing, domestic violence or traumatic experiences.
- Most maternal deaths could be prevented. The MMR team votes on whether or not they think the death could have been prevented, and in the majority of cases they said yes.
- The late postpartum period, months after delivery, is when deaths are occurring. In the group of cases reviewed, all of the deaths occurred in the late postpartum. This is contrary to what people may think is the riskiest period: it is not on the day of delivery but months later. Especially for women dealing with SUD and social stressors, the postpartum period can be a time when it is harder for them to get the support they need.

Based on these findings, the MCDRC recommends these priorities:

- To address the multiple kinds of stressors affecting women at risk, we recommend
 healthcare providers make more referrals to offer them the services of a care coordinator
 who can help women navigate the system to get the care they want.
- 2. To connect women at the time of delivery so they are set up for postpartum follow up, we propose embedding care coordinators, including nurse navigators, in delivery hospitals.
- 3. To reduce the occurrence of overdose deaths, we recognize the importance of providers having discussions with women about harm reduction approaches to mitigate their risk of death—such as through the use of naloxone—even in the midst of living with SUD.

More details on the circumstances of the cases reviewed, the contributing factors and rationale for the priority recommendations follow.

Cases Reviewed

Understanding why young women die during or after pregnancy is a crucial question public health agencies across the country strive to understand so they can make improvements in the medical and social programs caring for women and young families. Delaware's MMR Committee investigates all cases when a woman dies while pregnant or up to one year after the end of the pregnancy, no matter what the cause of death is. In Delaware we have about 10 pregnancy associated deaths each year. The MMR Committee takes a deep look at these deaths to try and

¹¹ A pregnancy associated death is the death of a woman while pregnant or up to one year after the end of pregnancy from any cause. For more definitions, See the glossary in Appendix D.

understand what were the contributing factors that put the woman at risk for death and then propose ideas for how to address these factors through recommendations. In the course of doing these reviews, the MMR Committee tries to understand if the death was due in any way to the woman's being pregnant. If so, these deaths are classified as being pregnancy related.

In 2024 the Delaware MMR Committee reviewed nine pregnancy associated cases. The cases represent deaths that occurred on average two years prior, dating from 2021 through 2023. Of the nine cases reviewed, six women were White, and three were Black; one woman was Hispanic. Figure 10 shows the number of pregnancy associated deaths reported to the Commission by year of death, and Figure 11 shows which of these deaths were reviewed in 2024 and included in this report.

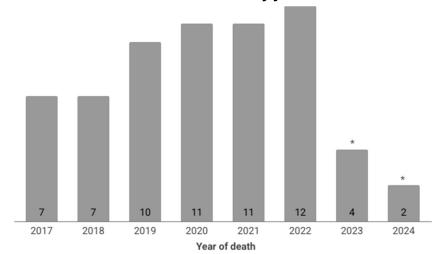


Figure 10: The number of maternal deaths by year of occurrence in Delaware

^{*}Numbers are preliminary and subject to change based on future identification of pregnancy associated cases

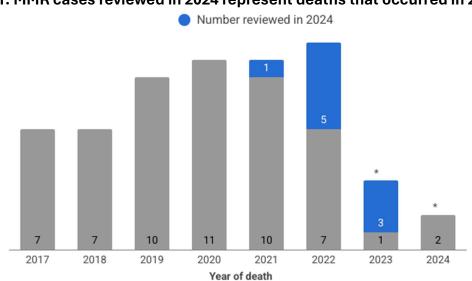


Figure 11: MMR cases reviewed in 2024 represent deaths that occurred in 2021-2023

^{*}Numbers are preliminary and subject to change based on future identification of pregnancy associated cases

Patterns in the Data

Of the nine cases reviewed in 2024, five of them were due to drug overdose (Figure 12). Overdose has been the most common cause of death among MMR cases for the last five years in Delaware.

Key findings in the nine cases reviewed include:

- No case was determined to be pregnancy related. However, in two of the nine cases the MMR Committee felt they did not have enough information to determine pregnancy relatedness.
- The late postpartum period continues to be the time of greatest risk for maternal deaths. All deaths occurred weeks to months after the end of the pregnancy in the late postpartum period (43-365 days postpartum).
- Six of the nine deaths were potentially preventable. The MMR Committee felt that most cases could have been prevented if there had been some change in a system, facility, provider or individual level risk factor that made the woman more likely to die.
- Maternal death cases reveal multiple levels of risk factors based on medical, behavioral and social conditions. The Committee found many contributing factors in the review of the nine pregnancy associated cases. On average there were nine contributing factors identified in each case, and many of these were at the patient or family level, meaning that the woman experienced a lot of risk factors in her personal life based on her medical issues, behavioral health issues, social environment or life experiences over time. The most frequently identified individual level contributing factors were SUD, trauma and mental health. Many women were also experiencing financial hardships, violence, social isolation and/or unstable housing. These overlapping and multiple risk factors in the woman's life were not fully recognized or addressed when she tried to access health care services.

Figure 12: Underlying cause of death in the nine MMR cases reviewed

Overdose 5	Trauma (motor vehicle collision)	Cancer 1
		Covid pneumonia 1



What Reviews Revealed: from Findings to Recommendations

Care Coordination

The MMR cases with multiple risk factors across physical, mental, social and economic areas are a real testing point of our health care system, and under the scrutiny of these complex cases, the system set up to care for women shows gaps. One reason for the gaps or failings in our health care system is that providers are highly specialized, spread out across different sites and focused on only one aspect of well-being, either physical or mental or social issues. Often, they do not see their patient as a whole person or really understand all that their patient is dealing with in their life. As a result, patients need to go to different providers and often different places to address medical and social needs. The system, and navigating through it, is very confusing, frustrating and

time-consuming. In most of our MMR cases, women did not get help navigating through the health care system.

Care coordination is also a priority issue based on the review of stillbirths and infant deaths

The Fetal & Infant Mortality Review (FIMR) team also identified care coordination as a priority issue based on their review of cases in 2024. Their recommendations reflect the need for public education on the benefits of care coordination and the importance of a streamlined, single access entry for all Medicaid patients. See page 23 to read more about the FIMR recommendations on care coordination.



However, there is help available for patients to manage all of their care between different parts of the health care system, and it is called care coordination. In many of our MMR cases, reviewers felt that the woman would have benefitted from care coordination which is a free service offered by all Medicaid MCOs. As six of the nine women were on Medicaid, they would have qualified for free care coordination services.

Based on the 2024 MMR cases, Committee members voted on four priority recommendations having to do with care coordination. Each recommendation addresses a slightly different gap in the system of care for women with multiple risk factors. The first recommendation reflects the important transition point at delivery when women are going from prenatal care to postpartum care. The postpartum period is a uniquely stressful time for families with many competing demands, a big one being caring for a newborn. Sleep deprivation, hormonal and physical changes all make women more vulnerable for health-related complications. Relationship and financial stresses may also surface at this time. In MMR we see that the majority of maternal deaths occur in the postpartum, 72% of all pregnancy associated deaths reviewed in the last five years. The support of a care coordinator can be particularly beneficial to navigate the challenges that emerge in the postpartum period. A care coordinator can check in on the mother after she goes home from the hospital to see how she is doing. If she needs information, referrals or other resources, the care coordinator can help arrange all of these.

What can we do: Increase referrals to Medicaid care coordinators

The MCDRC recommends that all birthing hospitals work with the three Medicaid

MCOs in Delaware to embed a MCO care coordinator staff member on site to ensure
all pregnant and postpartum patients are connected to their MCO care coordination
team and that they are involved in discharge planning.

As mentioned above, the postpartum period involves particular risks and stresses for a woman who has recently delivered. A nurse serving in the role of care coordinator, known as a nurse navigator, might be particularly poised to help a woman. A nurse understands the changes in the woman's body after birth—both in her physical body and mental health as impacted by changing hormones—and the particular obstetric complications that can show up even after delivery. A nurse navigator following up with a woman after hospital delivery may be the most efficient way to figure out if the woman needs medical attention for any new symptoms or ongoing issues that arose during her pregnancy. Especially for a woman who had physical or mental complications during the pregnancy—such as diabetes, hypertension or depression—a nurse navigator has the clinical expertise to help her figure out how to best care for these complications in the postpartum.

¹² The postpartum here is defined as any time after the first day postdelivery and up to one year.

What can we do: Respond to the special needs right after delivery

MCDRC recommends that birthing hospitals hire a nurse navigator to help plan for discharge and early postpartum follow up for all delivery patients.

Three of the nine MMR cases reviewed in 2024 reveal the stories of women who used the Emergency Department (ED) many times to access healthcare because they did not have a medical home, a healthcare provider or clinic that addressed their health care needs in a holistic and continuous way over time. Repeatedly accessing an ED for non-urgent care is time-consuming, frustrating and fragmented for patients. If ED staff recognize that a woman does not have a medical home or primary care provider, they could ideally put her in touch with a care coordinator who can follow up to help the woman figure out if a primary care provider or women's health provider could better serve her needs.

What can we do: Increase care coordination access in the Emergency Department (ED)

The MCDRC recommends that hospitals and healthcare facilities consider how they can increase access for care coordination and referral services around the clock for high-risk patients seen in the ED, with priority given to pregnant patients seen in the ED.

Women who are incarcerated during pregnancy are at particular risk for gaps in their care. Transitioning into and out of incarceration, a pregnant woman will likely have to switch obstetric providers. During incarceration, if a woman has Medicaid MCO coverage, there is an opportunity to notify her MCO that she is pregnant and put her in touch with a care coordinator. The Obstetric Needs Assessment Form (ONAF) alerts a MCO that a woman is pregnant and has risk factors that would make her eligible for care coordination. A care coordinator can reach out to the woman even during incarceration to start building a trusting relationship and planning for support services needed after release.

What can we do: Communicate when a pregnant woman is incarcerated

MCDRC recommends that an Obstetrical Needs Assessment Form (ONAF) be completed for every incarcerated pregnant person seen in the Department of Corrections (DOC) system to connect them to their Medicaid MCO care coordination team, ensure support, better discharge planning and follow up after release.

Overdose Prevention

A fifth priority recommendation addresses the fact that overdose is persistently the leading cause of maternal deaths. MMR findings in overdose cases reveal missed opportunities for the provision of education on overdose prevention and harm reduction. A harm reduction approach

emphasizes trying to reduce the negative consequences of drug use without demanding a person abstain completely from drugs. Often times, in the midst of addiction, people suffer significant physical and mental problems because their bodies have gotten used to the drugs and feel really sick when they withdraw. Some MMR cases demonstrate that women are seen in clinics or EDs with known complications from SUD, and while their immediate concerns are addressed, they are not asked about their access to naloxone or counseled on their risk for overdose. A provider asking permission to discuss a woman's drug use and then speaking to her in a non-judgmental way may be able to help her take small steps towards recovery. Providers outside of behavioral health may need extra training to practice having these conversations in an open and non-judgmental way. The Delaware Division of Substance Abuse and Mental Health (DSAMH) has experts and resources that can help women's health providers gain confidence in having these conversations and then refer women who are interested in treatment and peer support services.

What can we do: Adopt a harm reduction approach to substance use

The MCDRC recommends that DSAMH educate women's health providers and primary
care providers about resources available through HelpisHereDE.com, including free
access to Narcan kits, so that providers can better engage patients with SUD in harm
reduction strategies.



The Community Action Team

The MCDRC supports a CAT to identify actionable steps for implementing some of the recommendations coming from FIMR and MMR teams. In 2024, the CAT met five times and considered 2022 and 2023 recommendations in setting priorities for a work plan. Supporting pregnant and postpartum women with SUD and accessing care coordination were the two issues that emerged as both highest priority and actionable. Including members from various hospitals and all the Medicaid MCOs, the CAT is positioned to take a multilevel approach to addressing these issues, considering facility and insurer policies as well as community education efforts.



A public meeting of the MCDRC was held in the Route 9 Innovation Center on October 29, 2024, to share findings and recommendations from the work of the Commission's review teams and get community input.



Conclusion

The prevention of maternal, infant and child deaths is of great importance to all Delawareans. It is the work to strengthen families so that all people, especially our youngest, can live their healthiest life possible and fulfill their greatest potential. The work of the Commission relies on its dedicated partners and volunteers who look at some of the most tragic losses in our society, bear witness and learn to do better.

This report shares our lessons from the losses. We hope it adds, in some small way, to the case for doing better by our communities, one family at a time.

Appendix A: Key 2024 Facts and Figures

Overall:

- MCDRC reviewed 103 cases of fetal, infant, child or maternal death in 2024.
- Six separate review teams met regularly throughout the year to accomplish detailed reviews of each case.
- MCDRC held two public meetings to share its findings and recommendations widely.

Child Deaths (Child Death Review/Sudden Death in the Young):

- Among 46 cases of this type, 12 were infant deaths and 34 were deaths of children aged 1-17.
- 8 infant deaths were linked to unsafe sleep environments, such as sleeping in an adult bed or in a crib with soft bedding or toys nearby.
- The Cribs for Kids (C4K) program distributed 373 cribs, a 12% increase from the prior year.
- 9 trainings on infant suffocation prevention were held to onboard new C4K partners, helping to ensure that safer sleep environments reach more communities statewide.
- In two-thirds of cases related to unsafe sleep environments, a caregiver was impaired by alcohol, marijuana, or other drugs.

Stillbirths and Infant Deaths (Fetal and Infant Mortality Review):

- Among 48 cases of this type, 50% were stillbirths.
- Delaware's FIMR team was able to review cases in almost real-time, with only a 5-month lag between death and review.
- 1 in 3 FIMR cases involved difficulties and delays in a mother accessing prenatal care.

Maternal Deaths (Maternal Mortality Review):

- 9 cases were reviewed.
- Overdose was the leading cause of maternal death for the fifth consecutive year.

For more details see the 2024 Annual Report Data Addendum.

Appendix B: How cases are assigned to one of four types of review panels

Delaware's Maternal and Child Death Review Commission organizes and conducts four types of reviews of deaths: Child Death Review; Sudden Death in the Young; Fetal and Infant Mortality Review; and Maternal Mortality Review. All reviews are based on the MCDRC's statutory obligation to review all maternal deaths and deaths of children and youth under 18 years of age who are Delaware residents.

Each type of review is an in-depth, multidisciplinary effort to understand what happened and why, so that the appropriate agency, organization, or system can take steps to avert preventable deaths in the future.

Child Death Review and Sudden Death in the Young

CDR and SDY panels review different types of cases. The CDR panel reviews cases that are assigned suicide or homicide as the manner of death, as well as many of the accidental and natural causes of death. For SDY, the defining question is if the death was sudden and unexpected. Often, SDY cases are initially undetermined or possibly unsafe sleep related in manner or circumstance. Occasionally, SDY will review the death of an older child due to drowning.

Fetal and Infant Mortality Review

Some deaths of infants (children less than one year old) are assigned to a FIMR team if they do not involve suspected abuse, neglect or unsafe sleep factors. FIMR also reviews cases of stillbirths that occur after 20 weeks gestation. For all FIMR cases that are referred to the MCDRC, staff reach out to the mother and invite her to participate in a family interview. If she accepts, her case is fully reviewed. A subset of other cases to review are randomly selected so that about half of fetal and infant deaths occurring in Delaware receive a full FIMR review.

Maternal Mortality Review

Deaths of women during pregnancy and up to one year after the end of a pregnancy, from any cause, are assigned to Maternal Mortality Review.

Appendix C: 2024 MCDRC Recommendations

Care Coordination

- In-patient psychiatric providers should communicate with a child's primary care physician and outpatient mental health providers to establish a follow up plan of care for the child prior to discharge. (CDR)
- MCDRC recommends that the CAT, Medicaid MCOs and community-based organizations
 work on tailoring community education materials to promote care coordination: what it is
 and how it can be of benefit to pregnant and postpartum women. (FIMR)
- The MCDRC supports the efforts of the DMMA and Medicaid MCOs to streamline a singleentry referral process for all MCO-based care coordination services, regardless of the specific MCO to which a person belongs, and to educate providers on the referral process. (FIMR)
- The MCDRC recommends that all birthing hospitals work with the three Medicaid MCOs in Delaware to embed a MCO care coordinator staff member on site to ensure all pregnant and postpartum patients are connected to their MCO care coordination team and that they are involved in discharge planning. (MMR)
- MCDRC recommends that birthing hospitals hire a nurse navigator to plan for discharge and early postpartum follow up for all delivery patients. (MMR)
- The MCDRC recommends that hospitals and healthcare facilities consider how they can
 increase access for care coordination and referral services around the clock for high-risk
 patients seen in the ED, with priority given to pregnant patients seen in the ED. (MMR)
- MCDRC recommends that an Obstetric Needs Assessment Form be completed for every incarcerated pregnant person seen in the Department of Corrections system to connect them to their Medicaid MCO care coordination team, ensure support, better discharge planning and follow up after release. (MMR)

Policies

- MCDRC would like legislators to consider a statue change to allow cases to be reviewed by a panel pending any prosecution decisions. This will allow more complete review of all manners of cases and in a timelier fashion to identify systems opportunities for prevention. (CDR/SDY)
- The MCDRC supports DMMA's efforts to reimburse for evidence-based home visiting services such as Nurse Family Partnership, Healthy Families Delaware and Parents as Teachers. (FIMR)

Social Determinants of Health

To increase availability of social service referrals, the MCDRC recommends women's health
clinics and birthing facilities have a staff member trained to make referrals supporting
social needs. Commonly accessed programs in the perinatal period include WIC (Women,

Infants, and Children Program), Medicaid, evidence-based home visiting and Medicaid MCO care coordination services. (FIMR)

Clinical Care

The MCDRC recommends that DPQC material to promote the 4th trimester/interconception
care and early postpartum safety check include materials appropriate for women who have
experiences a pregnancy loss. Clinical protocols should acknowledge these women's high
risk in future pregnancies and provide extra supports for bereavement counseling and
interconception services. (FIMR)

Access to Care

 To increase the training and expertise of health care professionals in Delaware, the MCDRC recommends that DPH, educational institutions in Delaware and other state agencies support the creation of a nurse midwifery school in Delaware that gives priority to in-state residents. (FIMR)

Substance Use Disorder

The MCDRC recommends that DSAMH educate women's health providers and primary care
providers about resources available through HelpisHereDE.com, including free access to
Narcan kits, so that providers can better engage patients with SUD in harm reduction
strategies. (MMR)

Infant Suffocation Prevention

MCDRC staff will refine the Cribs for Kids outreach strategy to develop a plan for more
consistently engaging potential partners in SUD treatment and residential recovery. The
goal in 2025 is to establish contact with 10 SUD programs and conduct trainings at two of
them. (SDY)

Appendix D: Glossary

Black: Persons who identify as Black non-Hispanic, usually as marked on a vital statistics document such as a birth or death certificate.

Child death: The death of a child before their 18th birthday.

Fetal death: Sometimes known as "stillbirth," fetal death is the spontaneous death of a developing human in the uterus two months or more after conception.

Fetal mortality rate: The number of fetal deaths at 20 weeks of gestation or more per 1,000 live births and fetal deaths in a defined population.

Hispanic: Persons who identify as being of Hispanic ethnicity, usually as marked on a vital statistics document such as a birth or death certificate.

Infant death: The death of a child before their first birthday.

Infant mortality rate: The number of infant deaths per 1,000 live births in a defined population.

Maternal death: A term used synonymously with "pregnancy associated death" in this report.

Pregnancy associated death: A death during pregnancy or within one year of the end of pregnancy from any cause. Also referred to as a "maternal death" in this report.

Pregnancy associated but not related death: A death during pregnancy or within one year of the end of pregnancy from a cause that is not related to pregnancy.

Pregnancy related death: A death during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiological effects of pregnancy.

Pregnancy related mortality ratio: The number of pregnancy related deaths per 100,000 live births in a defined population.

Stillbirth: A term used synonymously with "fetal death" in this report.

White: Persons who identify as White non-Hispanic, usually as marked on a vital statistics document such as a birth or death certificate.

Appendix E: List of Abbreviations

CAT	Community Action Team		
CDC	Centers for Disease Control and Prevention		
CDR	Child Death Review		
CPAC	Child Protection Accountability Commission		
DHMIC	Delaware Healthy Mother and Infant Consortium		
DMMA	Delaware Medicaid and Medical Assistance		
DPH	Division of Public Health		
DPQC	Delaware Perinatal Quality Collaborative		
DSAMH	Division of Substance Abuse and Mental Health		
ERASE MM	Enhancing Reviews and Surveillance to Eliminate Maternal Mortality		
FIMR	Fetal and Infant Mortality Review		
MCH	Maternal child health		
MCO	Managed Care Organization		
MMR	Maternal Mortality Review		
SDY	Sudden Death in the Young		
SUD	Substance Use Disorder		
SUID	Sudden Unexplained Infant Death		

Appendix F: Commissioners and Review Team Members

Maternal and Child Death Review Commission

Role	Designee
Department of Justice	Patricia A. Davis
State Police	Corporal Andrea Warfel
Delaware Medicaid and Medical Assistance	vacant
Department of Services for Children, Youth and their Families	Trenee Parker
Department of Education	Cassandra Codes-Johnson
Office of the Child Advocate	Tania Culley
Division of Substance Abuse and Mental Health	Heather Doncaster
Office of the Medical Examiner	Gary Collins
Division of Public Health	Mawuna Gardesey
SDY Panel Chair	Mary Ann Crosley
SDY Advanced Panel Chair and Pediatrician	Amanda Kay
CDR Panel Chair and OB/GYN	Philip Shlossman
MCDRC Co-Chair, FIMR New Castle Chair	Aleks Casper
FIMR Kent/Sussex Chair	Bridget Buckaloo
MCDRC Chair, MMR Chair and Perinatologist	Garrett Colmorgen
Neonatologist	David Paul
Delaware Nurses Association	Nancy Forsyth
Licensed Mental Health Professional	Fran Franklin
Police Chiefs Council	Chief Laura Giles
New Castle County Police Department	Lt. Mike Bradshaw
Child Advocate, non-profit	Patti Dailey-Lewis
Maternal Advocate, non-profit	Doris Griffin
Certified Nurse Midwife	Michelle Drew

CDR Panel Members

Nicole Alexander

Angela Birney

Ann Covey

Sgt. Jennifer Lynch

Jen McCue

Nicholas Perchiniak

Philip Shlossman, Chair

Capt. Darren Short

Lt. Matthew Smith

Tina Ware

SDY MDT/First Level Panel Members

Olufolake Remi Adepoju

Nicole Alexander

Angela Birney

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