



# **Minnesota Department of Health Interim Legislative Report: Stillbirth Prevention Through Tracking Fetal Movement Pilot Program**

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Through Tracking Fetal Movement Pilot Program**

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MINNESOTA DEPARTMENT OF HEALTH INTERIM LEGISLATIVE REPORT:  
STILLBIRTH PREVENTION THROUGH TRACKING FETAL MOVEMENT PILOT  
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## Overview

In 2024, the [Minnesota State Legislature \(PDF\)](#) awarded Healthy Birth Day, Inc., an Iowa-based stillbirth prevention research, advocacy, and education organization, \$200,000 to implement a stillbirth prevention pilot program for Minnesota during fiscal years 2025-2027. The program aims to provide evidence-based education and resources on the importance of fetal movement monitoring in the third trimester of pregnancy to prevent stillbirth in Minnesota. Healthy Birth Day, Inc. is additionally tasked with collecting data to evaluate the effectiveness of preventing stillbirths through fetal movement monitoring in the third trimester of pregnancy.

The legislation states that the Commissioner of Health must submit to the legislative committees with jurisdiction over public health an interim report and a final report on the operations of the pilot program. Each report must at least describe the pilot program's operations and provide information, to the extent available, on the effectiveness of the pilot program in preventing stillbirths in Minnesota, including lessons learned in implementing the pilot program and recommendations for future action.

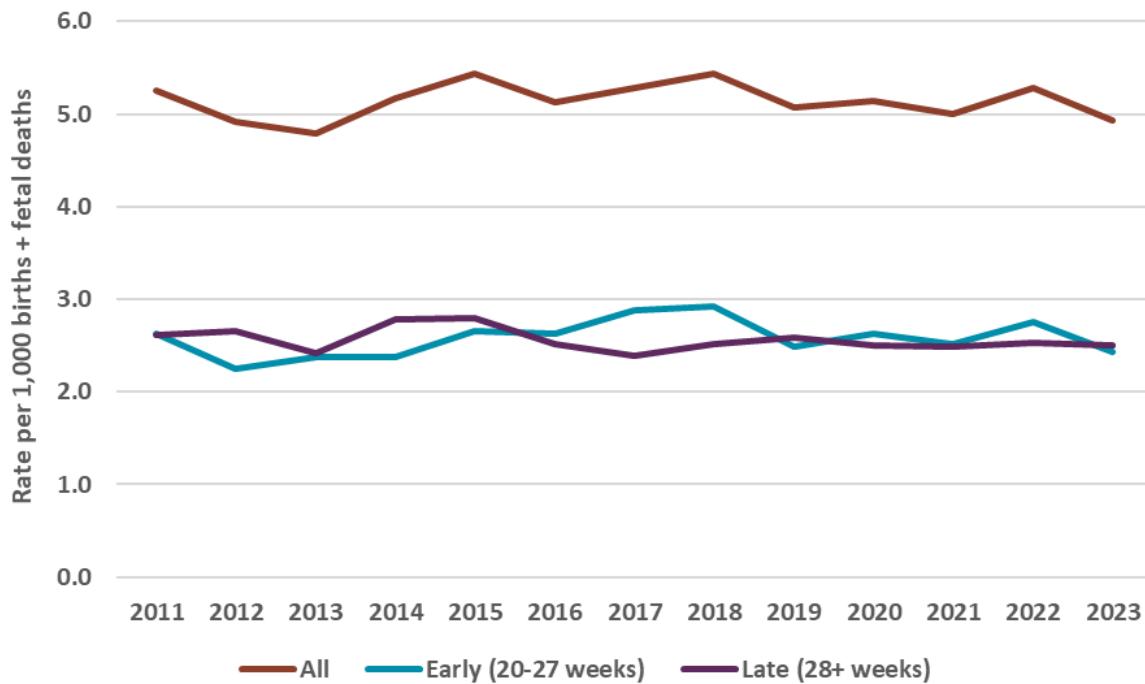
## Understanding stillbirth

Stillbirth is defined as a fetal death that occurs at or after 20 weeks gestation either in utero or at the time of delivery. Stillbirth is a significant public health concern and has life-altering and devastating consequences for individuals, families, and communities. According to the Centers for Disease Control and Prevention's [National Vital Statistics Reports, Fetal Mortality: United States, 2022 \(PDF\)](#), much of the focus on reproductive loss in the United States and Minnesota specifically has been on infant mortality, partially due to less knowledge about causes and prevention strategies for fetal mortality. The effects of stillbirth include prolonged grief, anger, fear, pain, guilt, depressive symptoms, anxiety, social isolation, loss of productivity, and financial hardship, according to the article [Stillbirths: economic and psychosocial consequences \(Heazell\)](#).

Over the past decade, stillbirth rates in Minnesota, including late-gestation or third-trimester stillbirths, have remained relatively stable, showing only modest year-to-year variation. While overall fetal mortality declined significantly in the 1990s and early 2000s, progress has slowed in the last 10 years, with late-gestation fetal deaths in particular exhibiting minimal change (Figure 1).

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**Figure 1. Minnesota stillbirth rate over time by timing of death, 2011-2023.**

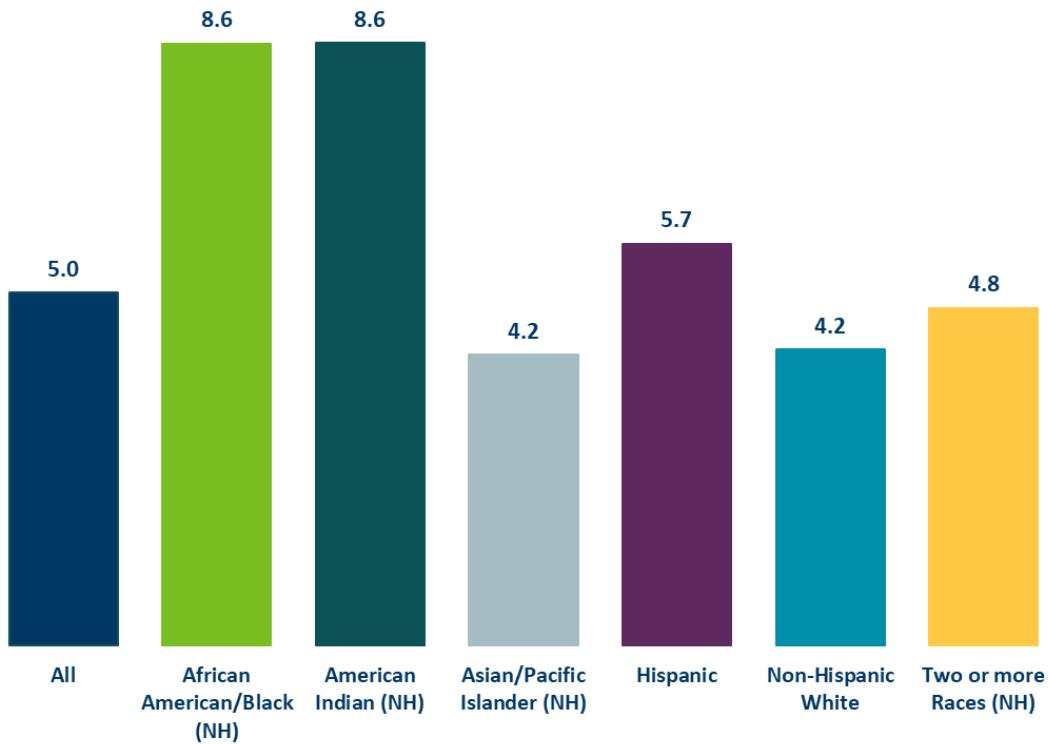


Source: Minnesota Resident Final Fetal Death and Birth File, 2011-2023

In Minnesota, disparities in stillbirth are pronounced, and of particular concern are persistent disparities in fetal loss by race/ethnicity. Non-Hispanic Black/African American and American Indian pregnant and birthing people are at greater risk of experiencing a stillbirth than infants born to non-Hispanic White pregnant and birthing people. Between 2021 and 2023, the stillbirth rates for non-Hispanic Black/African American and non-Hispanic American Indian birthing people were two times the rate for non-Hispanic White birthing people (Figure 2). The Centers for Disease Control and Prevention attributes these disparities in rates to numerous underlying causes, including access to quality health care, pre-existing health conditions, and structural discrimination.

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**Figure 2. Stillbirth rates (fetal deaths per 1,000 live births and fetal deaths) by race/ethnicity in Minnesota, 2021-2023**

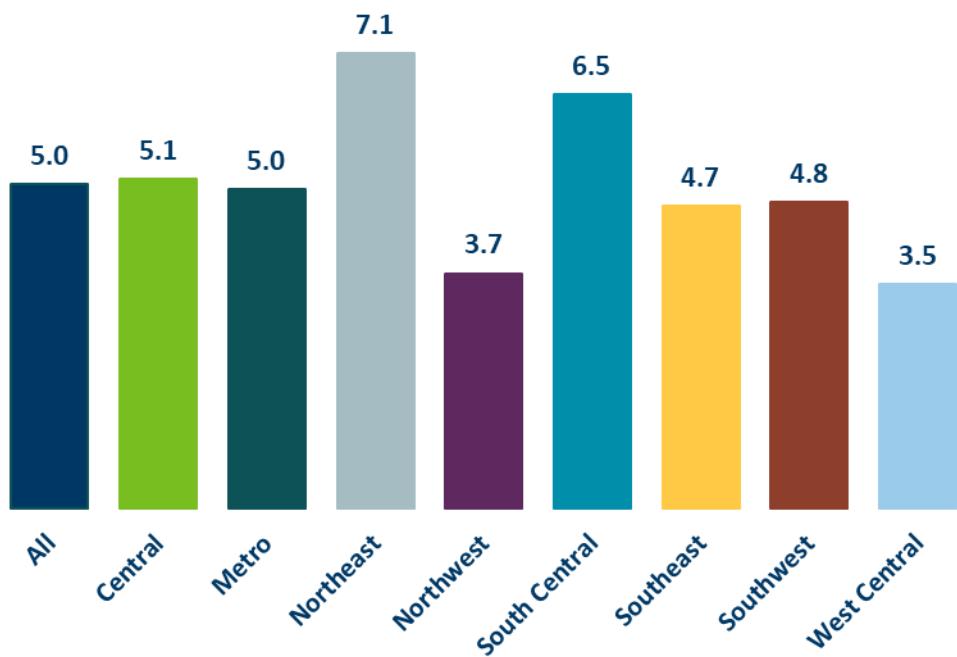


Source: Minnesota Resident Final Fetal Death and Birth File, 2021-2023.

In addition to disparities in stillbirth rates by race/ethnicity in Minnesota, Figure 3 shows that stillbirth rates vary by geographic region across the state. Stillbirth rates range from a low of 3.7 per 1,000 live births and fetal deaths in the South Central region of the state to a high of 7.1 per 1,000 live births and fetal deaths in the Northeast region of the state. The stillbirth rate in the Metro area, which includes the seven metro counties of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington, was 5.0 per 1,000 live births and fetal deaths. This rate was about the same for the Central and Northeast regions of the state.

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**Figure 3. Stillbirth rates (fetal deaths per 1,000 live births and fetal deaths) by Minnesota Region, 2021-2013**



Source: Minnesota Resident Final Fetal Death and Birth File, 2021-2023.

A recent report by the March of Dimes, [Where you Live Matters: Maternity Care Access in Minnesota \(Fontenot\)](#), provides important insights into some possible factors that likely contribute to the observed geographic variations in stillbirth rates across Minnesota. Findings from the report suggest that access to maternal care and the level of care depends on where one lives. According to the report:

- 19.5% of counties in Minnesota are considered maternity care deserts compared to 32.6% in the United States.
- 14.1% of women had no birthing hospital within 30 minutes compared to 9.7 % in the United States.
- In rural areas across the state:
  - 38.6% of women and birthing people live over 30 minutes from a birthing hospital compared to 11.9% of women in urban areas.
  - Women and birthing people in Minnesota who live in areas that are considered maternity deserts in Minnesota travel 2.3 times farther than women living in areas where full access to maternity care exist.

## Pilot program operations

### Legislatively named grantee for pilot program: Healthy Birth Day, Inc.

Count the Kicks® was created by Healthy Birth Day, Inc. as a method to track fetal movement during the third trimester of pregnancy. Count the Kicks® was implemented in Iowa, in partnership with the Iowa Department of Public Health, and research findings demonstrated a stillbirth rate reduction in Iowa that did not occur in surrounding states as reported in the article, [Information about fetal movements and stillbirth trends: Analysis of time series data](#). The purpose of testing this approach in Minnesota is to determine if fetal movement monitoring in the third trimester of pregnancy can contribute to reductions in stillbirth in Minnesota.

### Grantee program operations

After the funds were legislatively awarded for this pilot program, the Minnesota Department of Health (MDH) worked closely with Healthy Birth Day, Inc. over a series of months to develop the grant agreement. Healthy Birth Day, Inc., based in Iowa, was not established as an entity in the State of Minnesota at the time they were awarded funds for the stillbirth prevention grant, and this was the first time they received a grant from the State of Minnesota. Healthy Birth Day, Inc. registered with the Secretary of State of Minnesota to do business in Minnesota and received a certificate of good standing. The grant funds were legislatively awarded to Healthy Birth Day, Inc. in a non-competitive process, and MDH completed a thorough due diligence review before officially awarding funds and beginning the grant agreement negotiation process. MDH and Healthy Birth Day, Inc. worked together to develop a workplan and program budget and discussed all aspects of the grant agreement, specific to working in the State of Minnesota. After several revisions and discussions, as well as legal counsel review, MDH and Healthy Birth Day, Inc. finalized the grant agreement and it was fully executed on April 15, 2025.

The stillbirth prevention program provides grant funding to Healthy Birth Day, Inc. for the following activities:

- Ensuring that expectant parents in Minnesota receive information about the importance of fetal movement tracking in the third trimester of pregnancy by providing evidence-based information to a variety of organizations, including hospitals, community-based organizations, birth centers, maternal health providers, and higher education institutions that educate maternal health providers.
- Providing maternal health providers and expectant parents in Minnesota with access to free, evidence-based educational materials on fetal movement tracking, including brochures, posters, reminder cards, continuing educational materials, and digital resources.
- Assisting MDH in creating and launching stillbirth prevention awareness campaigns that target providers and include information about:
  - The availability of free fetal movement tracking education for providers.

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- The importance of tracking fetal movement in the third trimester of pregnancy by offering educational training opportunities.
- The importance of tracking fetal movement in the third trimester of pregnancy through provider participation in a public relations campaign.
- Assisting MDH in raising public awareness about the availability of free fetal movement tracking resources through social media marketing and traditional marketing throughout Minnesota.

MDH and Healthy Birth Day, Inc. have collaborated and engaged in ongoing communication and program planning since the grant period began. MDH and Healthy Birth Day, Inc. met monthly for the first six months of the grant period to establish shared goals, build a partnership, and support the success of the stillbirth prevention pilot program. The initial meetings focused on discussing updates on the budget and programmatic progress, including successes and challenges, along with technical assistance needs of the grantee. MDH also conducted financial reviews of source documentation to verify expenditures during the initial months of the grant period. MDH conducted the first required monitoring visit on Sept. 25, 2025, which included a more extensive review of the work to date, budget review, and policies and procedural compliance. Additionally, MDH provided ongoing technical support on invoicing and budget modifications for the grantee's staff members.

MDH developed tools for Healthy Birth Day, Inc. to collect and track information on process measures outlined in the grant agreement for quarterly data sharing and reporting purposes. Data collected by Healthy Birth Day, Inc. includes the number of fetal movement tracking application downloads, as well as materials distributed by organization type and zip code, for example. MDH shared statistical data with Healthy Birth Day, Inc., as outlined in the legislation and grant agreement, on stillbirths in Minnesota by race/ethnicity and geographic regions to include in their annual report to MDH. MDH has worked with Healthy Birth Day, Inc. to support connections with the medical provider community across Minnesota.

## Overview of work completed

Healthy Birth Day, Inc. has made meaningful progress in a short time period, building upon their existing body of work and experience, while adapting their program and tools to meet the needs of Minnesota's diverse population.

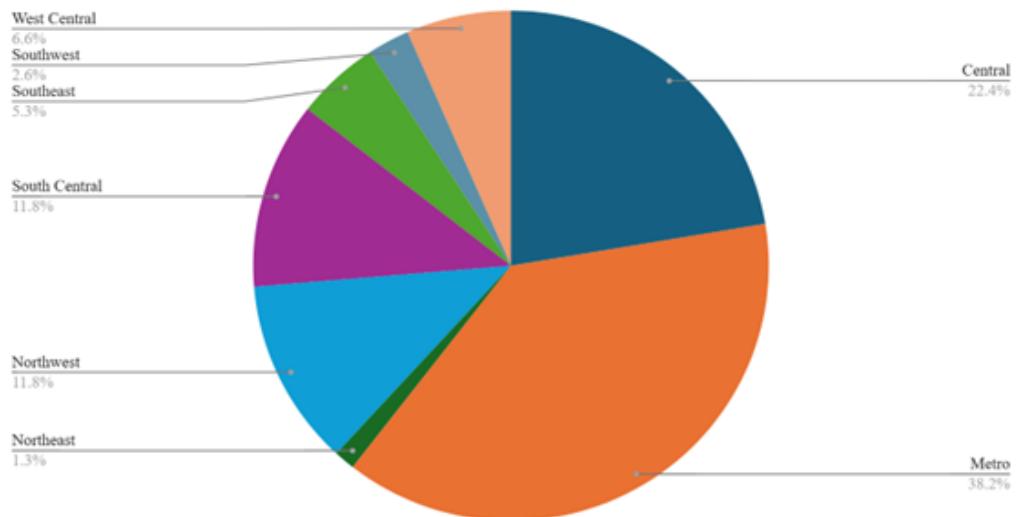
### Educational materials

Healthy Birth Day, Inc. developed Count the Kicks® educational materials specific to Minnesota to promote the pilot program and MDH staff members provided feedback. The educational materials include an app card, brochure, and poster available in English and Spanish. The materials were made available in June 2025 and can be accessed through the [Count the Kicks](#) website. Additionally, a broader range of languages is available in the digital and downloadable products from the website. Through Sept. 30, 2025, Healthy Birth Day, Inc. received 74 orders and distributed 12,725 materials.

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Materials have been distributed across the state of Minnesota with the Metro and Central regions representing approximately 61% of orders.

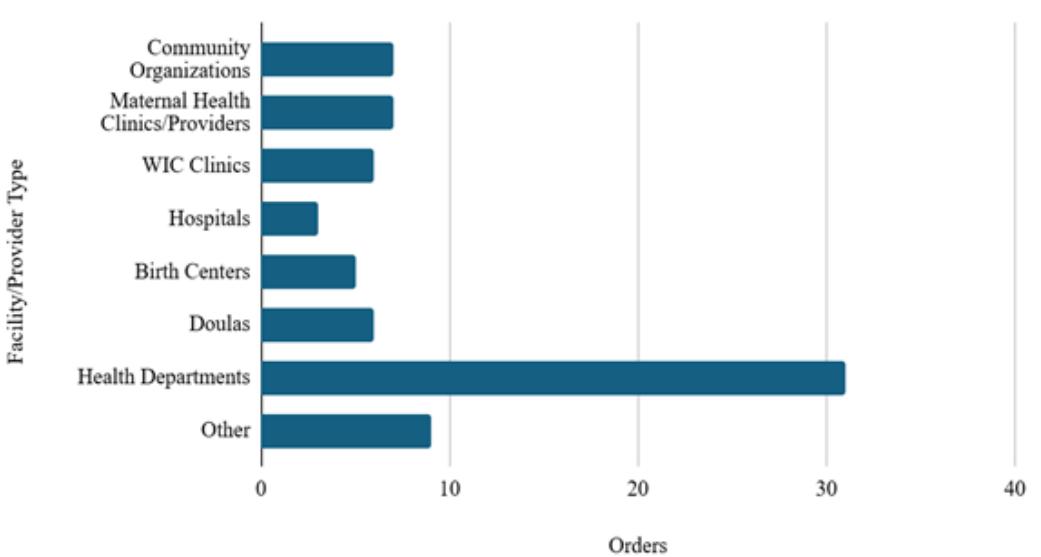
**Figure 4. Number of Educational Materials Distributed, May 2025-September 2025, by MN County Regions.**



Source: Healthy Birth Day, Inc.

The materials have been widely distributed across a range of organizations, including health departments, hospitals, and medical providers.

**Figure 5. Number of Educational Orders, April 15, 2025- September 30, 2025, by Provider/Facility Type.**



Source: Healthy Birth Day, Inc.

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The number of fetal movement tracking application downloads by Minnesota residents between July 2025 and October 2025 was 18,092. Of those downloads, 17,496 were by existing Minnesota users and 566 were new app users.

## Outreach and engagement

Outreach and engagement have been critical activities throughout the grant period, led by Healthy Birth Day, Inc., with the support of MDH. The stillbirth prevention program has been promoted since the beginning of the grant period through a variety of activities:

- Healthy Birth Day, Inc. staff members participated in the International Partnership for Perinatal Excellence Conference in June 2025. Following the conference, program materials were delivered to multiple health care facilities in Minnesota, including the Mother Baby Center at Abbott Northwestern, Hennepin Healthcare Birth Center, the Birthplace at Masonic Children's Hospital, Maple Grove Hospital, Mercy Hospital, and Alomere Health, as well as several WIC clinics.
- Healthy Birth Day, Inc. issued a press release announcing the launch of Minnesota's Stillbirth Prevention Through Tracking Fetal Movement Pilot in July 2025.
- Healthy Birth Day, Inc. organized and led a 60-minute webinar in August 2025 to share information on Count the Kicks® and the stillbirth prevention pilot in Minnesota as well as how organizations can implement the program in their settings. MDH promoted the webinar widely among grantees, partners, and colleagues. There were 83 registered attendees.
- Healthy Birth Day, Inc. shared a toolkit on Stillbirth Prevention and Awareness Day, including social media posts to increase awareness. MDH disseminated the social media toolkit to grantees, partners, and colleagues across the agency in September 2025.
- MDH tailored a Minnesota-specific message from the 2025 National Stillbirth Prevention and Awareness Day Toolkit created by Healthy Birth Day, Inc. and posted content on social media on Sept. 19, 2025.
- MDH developed an overview of Healthy Birth Day, Inc. and the Count the Kicks® stillbirth prevention pilot program posted on MDH's [Infant Mortality Reduction Initiative](#) webpage to promote and raise awareness of the program broadly in Minnesota in October 2025. The content includes direct links to web resources for Count the Kicks®.
- MDH organized a meeting between Healthy Birth Day, Inc. staff and MDH staff from the [Minnesota Maternal Mortality Review Committee](#) and the [Innovations for Maternal Health Outcomes in Minnesota \(I-MOM\)](#) to network and learn more about these initiatives. This meeting occurred in October 2025.
- Healthy Birth Day, Inc. participated in the Minnesota Perinatal Quality Collaborative's Perinatal Improvement Summit on Oct. 28, 2025, as a table sponsor. This event provided a great opportunity to connect with health care professionals from across Minnesota and distribute program materials. Healthy Birth Day, Inc. connected with over 100 attendees and shared information on how to incorporate Count the Kicks® into health care practices.

## Lessons learned

There have been several lessons learned since the inception of this stillbirth prevention pilot program. This is an ambitious project that was designed to be implemented in a relatively short period of time. This is the first time Healthy Birth Day, Inc. has received a grant from the state of Minnesota and the first time they have implemented Count the Kicks® statewide in Minnesota. It can take time to develop relationships, learn about the many communities across Minnesota, and promote a new program and approach within health systems. Additionally, it can take time to build relationships between state agencies and a new grantee organization, as well as establish expectations of collaboration and guidance, knowing that practices can vary state by state. Healthy Birth Day, Inc. and MDH have worked together to build a strong partnership.

When evaluating programs aimed at improving fetal mortality, several data limitations can hinder the ability to draw definitive conclusions. One major issue is the challenge posed by small numbers. Fetal mortality is a relatively rare event. Minnesota experiences approximately 300 cases per year. This limited number can make it difficult to conduct robust statistical analysis, particularly when disaggregating the data by race, ethnicity, or geographic area. Small sample sizes increase the likelihood of random variation skewing the results, making it harder to detect meaningful trends or confidently assess program effectiveness. As a result, even if fetal mortality rates appear to improve over time, these changes may not be statistically significant or directly attributable to specific interventions without more comprehensive data.

Additionally, most program evaluations conducted in this context are observational and not designed as case-control or randomized studies. This means evaluators cannot establish causality, only associations or correlations. Without a controlled design, it is difficult to separate the effects of the program from other external factors that may influence fetal outcomes, such as socioeconomic changes, health care access, or concurrent public health initiatives. Therefore, while improvements in fetal mortality rates may be observed alongside the implementation of certain programs, the data may not provide the level of causal evidence necessary to continue or expand programming.

## Limitations of the scope of work

- The Count the Kicks program relies on fetal movement tracking alone, which cannot address structural causes of fetal mortality such as hypertension, racism, access to care, or delays in diagnostic evaluation. There is mixed evidence on the efficacy of fetal movement tracking and much of the evidence remains observational, not causal.
- The Count the Kicks program was not designed to determine root causes of stillbirth or address structural factors. However, understanding these drivers is essential to begin initiatives that aim to address stillbirth at its source.

## Recommendations for future action

- **Reinstate ongoing fetal and infant mortality reviews in Minnesota.** Although Healthy Birth Day, Inc. has made remarkable progress thus far in implementing the Count the Kicks® program in Minnesota to prevent stillbirth, the program is not intended to uncover the contributing causes of stillbirth. By contrast, fetal and infant mortality reviews, a well-established continuous quality improvement methodology, is designed to identify and reveal community and systems-level factors (e.g., social, economic, cultural, and safety) that may have contributed to infant and fetal deaths by conducting systematic, scientific, and objective review of cases. These reviews combine qualitative and quantitative data on each case reviewed. Confidentiality is assured for both families and providers. Case summaries are reviewed by an expert panel representing a cross-section of professionals and community members. Community and health systems issues are identified and recommendations for community and systems level changes are developed for implementation by community action teams. Minnesota once had the authority to access medical and health records related to infant and fetal deaths. However, the statute which authorized the Commissioner of Health to access birth, death, and medical records, as well medical examiners' reports to conduct fetal and infant mortality reviews ended on June 30, 2000. Without access to comprehensive information, it will be challenging for communities to understand circumstantial factors not captured by birth records that may have contributed to these deaths. In turn, these challenges may limit communities' ability to develop and implement the appropriate policy and programmatic solutions needed to improve pregnancy and birth outcomes.
- **Convene a group to review, prioritize, and implement key recommendations from the stillbirth report.** Between 2016 and 2017, the Maternal and Child Health Task Force convened a workgroup on stillbirths in Minnesota that released recommendations to prevent future stillbirths. The recommendations were compiled into a brief report, [Stillbirth Advisory Workgroup Report, Maternal and Child Health Advisory Task Force December 2022 \(PDF\)](#), but were never implemented. The Minnesota Legislature should consider authorizing and funding MDH to establish an interdisciplinary community action team that is tasked with prioritizing and implementing key recommendations from the report.
- **Provide ongoing funding to support grief and loss support services to Minnesota families who have experienced a stillbirth.** The State of Minnesota should make competitive grants available to organizations that provide culturally appropriate grief and loss support services to families who have experienced a stillbirth.
- **Award funds through a competitive RFP process to ensure that MDH is put in a directive role versus a reactive role.** The funds were legislatively awarded to Healthy Birth Day, Inc. in a non-competitive process, which didn't allow for articulation of performance benchmarks, discussion of consequences for underperformance, or accountability mechanisms beyond technical assistance.

## Addressing programmatic gaps

- **Strengthen cultural and linguistic responsiveness.** Adapt materials and engagement strategies to better reflect Minnesota's multilingual and diverse communities. This includes collaborating with Tribal health partners, BIPOC community organizations, family home visiting programs, and doula networks to ensure programming is culturally grounded, accessible, and effective.
- **Increase provider integration.** Without clinical adoption, education to patients alone cannot translate into reduced stillbirth rates. Incorporating data on implementation of the Count the Kicks program within clinical settings (electronic medical records, care pathways, or discharge instructions, etc.) would strengthen the connection. **Improve design limitations by monitoring intermediate outcomes.** The program currently lacks an evaluation plan. An evaluation that includes provider responses, prenatal visits prompted by reduced fetal movement, or increased clinical surveillance could help identify the need for extending or expanding programming.
- **Target populations with the highest stillbirth rates.** Currently, there are no strategic interventions to reach the populations with the highest stillbirth rates.
  - Black and American Indian birthing people have twice the stillbirth rate of White birthing people but there are no culturally specific strategies or partnerships with American Indian, Black, immigrant, or other culturally rooted maternal health organizations.
  - The highest geographic burden occurs in the Northeast region but 61% of materials went to Metro and Central regions.

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