

Minnesota Pregnancy Risk Assessment Monitoring System (PRAMS) Quarterly Newsletter

WINTER 2022/2023

Pregnancy Risk Assessment Monitoring System (PRAMS) is a surveillance project conducted by Centers for Disease Control and Prevention's (CDC) Division of Reproductive Health in collaboration with the Minnesota Department of Health (MDH). The PRAMS survey asks new moms about maternal behaviors, attitudes, and experiences before, during, and shortly after their pregnancies. Participants are resident women who recently gave birth in Minnesota to a live-born infant during the surveillance year. Women are sampled between two and six months after giving birth.

Special highlight

Minnesota Doula Workforce Survey – Open April 10 through May 1, 2023

Minnesota Department of Health (MDH) is seeking to learn more about Minnesota's workforce of doulas and birth workers in its efforts to improve the health outcomes of mothers, birthing people, and infants. MDH has hired GrayHall, a St. Paul consulting firm, to administer the survey and to complete a comprehensive report of findings.

MDH will use the survey findings to:

- Build a more comprehensive profile of the workforce of doulas and birth workers in Minnesota.
- Establish baseline demographic data of doulas/birth workers in Minnesota.
- Identify important gaps in service.
- Identify important strengths of the workforce.
- Support strategic objectives to increase access to doula/birth worker services.

Survey answers are strictly confidential. Participants' names and organization names will not be given or shared with any organization.

Link to Survey: [Minnesota Doula Workforce Survey](https://redcap.health.state.mn.us/redcap/surveys/?s=9TXRPK7EA8CLHH3M)
(<https://redcap.health.state.mn.us/redcap/surveys/?s=9TXRPK7EA8CLHH3M>)

(If the link does not work, try copying it into your web browser)

If you have questions, please contact:

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PRAMS highlights

The revision process for the Phase 9 (P9) survey has been completed. The new Phase 9 survey will be implemented in June. With the implementation of P9 surveys comes another significant milestone for MN PRAMS, the ability to offer participants a Web version of P9.

A timeline for upcoming Phase 9 activities is below:

Dates	Phase 9 Activities
April 2023 and ongoing	MN PRAMS will do User Acceptance Testing (UAT) for P9 Questions in PIDS for mail, phone, and web mode
April 2023	CDC provides final print files to PRAMS sites
June 2023	Phase 9 implementation
June 2023	MN PRAMS will implement Phase 9 Web Survey

Data spotlight

Safe sleep

This issue of our quarterly newsletter supports infant safe sleep awareness and includes Minnesota PRAMS data highlighting infant sleep practices among PRAMS participants (or Minnesota mothers who participated in the PRAMS survey) and additional safe sleep information.

Increasing awareness about infant sleep safety is both a national and statewide priority intended to reduce the incidence of sleep-related deaths during infancy by promoting evidence-based safe sleep practices. November 13-19, 2022 was [Infant Safe Sleep Week](https://www.health.state.mn.us/people/womeninfants/infantmort/safesleep.html) (<https://www.health.state.mn.us/people/womeninfants/infantmort/safesleep.html>) in Minnesota and the campaign was kicked off with a proclamation from Governor Walz. The purpose was to heighten the awareness of infant safe sleep practices and promote safe infant sleep, in efforts to reduce preventable infant deaths in Minnesota.

Here are some quick facts:

- Minnesota's infant mortality rate has historically been lower than the U.S. rate overall. In 2020, the infant mortality rate for Minnesota compared to the U.S. was 4.2 versus 5.4 infant deaths per 1,000 live births.^{1,2}

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- While, overall, infant death numbers in Minnesota have declined, persistent racial and ethnic disparities exist that reflect broader societal inequities, according to research. In Minnesota, between 2014 and 2018, the disparity was three times greater for Black infants and more than eight times greater for American Indian infants than for white infants.³
- Sudden Unexpected Infant Death (SUID) includes sudden infant death syndrome (SIDS), accidental suffocation and strangulation in bed or other sleeping environments, and deaths from unknown causes. From 2016-2020, SUID was the fourth leading cause of infant mortality in Minnesota.⁴
- The vast majority of SUID in Minnesota are largely preventable. State health department analysis of the 82 sudden unexpected infant deaths in 2019 and 2020 found that 99% were sleep-related and happened in unsafe sleep environments.⁵ Unsafe sleep environments include blankets, pillows, loose bedding, sofas, adult beds, toys, people, and pets in the sleep space.

"It's important to always have baby sleep on their back. Back is the safest."

- PRAMS respondent

A key takeaway for parents and caregivers is to know the ABCs of safe sleep:

- **A: Alone.** Infant and caregivers can share a room, but not the same sleeping surface. The use of soft bedding (e.g., blankets, pillows, and soft objects) in the infant sleep environment should also be avoided.
- **B: Back.** An infant should be placed to sleep or nap on their back.
- **C: Crib.** Place infant on a firm and leveled sleep surface such as a mattress in a safety-approved crib or bassinet.

Additional recommendations to reduce the risk for sleep-related infant deaths include having a smoke-free environment, breastfeeding, providing routinely recommended immunizations, and avoiding prenatal and postnatal exposure to alcohol and illicit drugs.

Comments from the Minnesota PRAMS survey reveal a need for modeling and teaching infant safe sleep best practices early on, before hospital discharge:

"I would like to see more info on safe sleeping. There are so many unsafe products out there and I had no idea at first. The first time anyone talked to me about it was at discharge, which is too late! I also wish my pediatrician would ask about the baby's sleep. So many parents just don't know any better."- PRAMS Respondent

National goals on infant sleep practices

The Healthy People 2030 Objective on infant safe sleep is tracked using PRAMS data. National Healthy People 2030 guidelines recommend increasing the proportion of infants who are put to

sleep on their backs from 79.8% (2019) to 88.9%.⁶ The guidelines also recommend increasing the proportion of infants who are put to sleep in a safe sleep environment.⁷

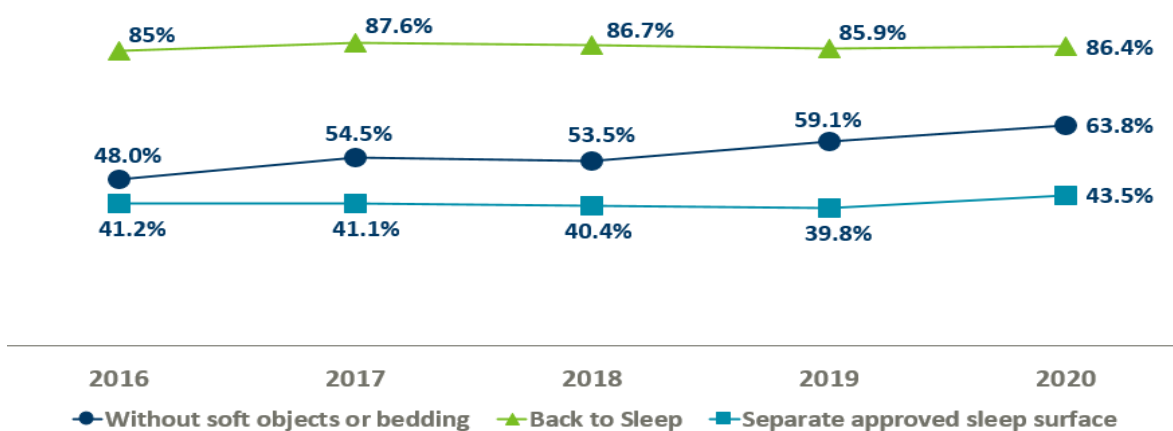
National Goals	Infant Sleep Practices
Healthy People 2030 Objective ⁶	MICH-14: Increase the proportion of infants who are put to sleep on their backs.
Healthy People 2030 Objective ⁷	MICH-D03: Increase the proportion of infants who are put to sleep in a safe sleep environment.

Infant sleep practices

The Title V Maternal and Child Health Block Grant, a source of support for promoting and improving the health and well-being of the nation’s mothers and children, also uses PRAMS data to track national and state outcomes.⁸

Analysis of Minnesota PRAMS data on infant sleep practices over time (Figure 1) shows that there is some evidence that the ABCs of safe sleep are being followed with steady improvements in the last three years of placing infants to sleep without soft objects or loose bedding. There were slight increases in both the percent of infants placed to sleep on their back (85% in 2016 to 86% in 2020) and the percent of infants placed to sleep on a separate approved sleep surface (41% in 2016 to 44% in 2020). Nationally, 52.5% of PRAMS respondents in 2020 reported that they placed their infant to sleep without soft objects or loose bedding. In 2020, 64% of Minnesota respondents reported placing their infant to sleep without soft objects or loose bedding, compared to only 48% in 2016, a 33% increase in the last 4 years.

Figure 1- Percent Practicing Safe Sleep Over Time



Social determinants of health (SDoH)

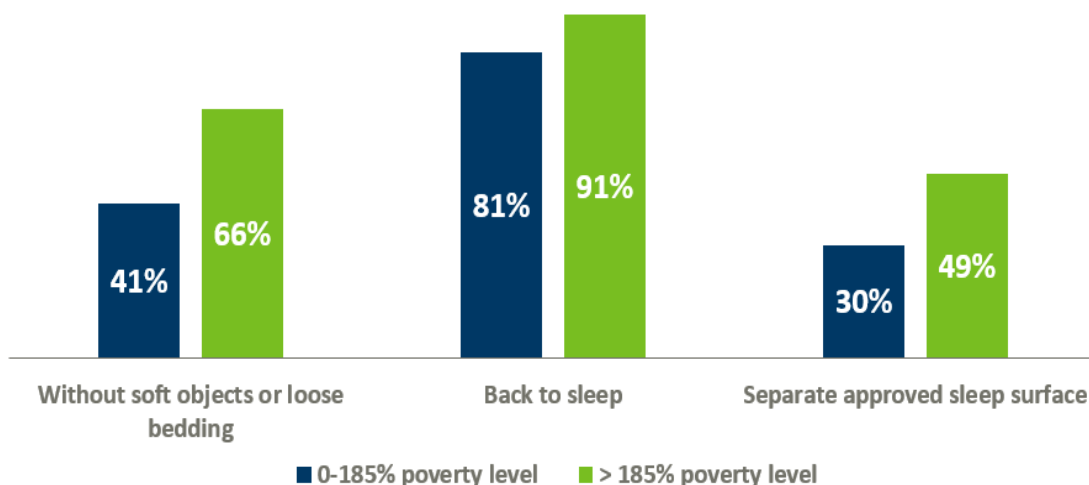
Social determinants of health are the conditions in the places where people live, learn, work, and play that affect a wide range of health risks and outcomes.⁹ MN PRAMS acknowledges that structural (social, economic, political, and environmental), intergenerational, and systemic racism creates inequities that directly result in poor health outcomes for African American/Black, American Indian, and other Communities of Color. All people living in Minnesota benefit when health disparities are reduced, and racial equity is advanced.

The following illustrates examples of the connection between social determinants and a family's ability to practice recommended safe infant sleep practices.

Level of income

Poverty affects about one in eleven Minnesotans and one in nine children in Minnesota.¹⁰ Some communities have a higher risk of poverty due to factors that are out of their control. For example, institutional racism and discrimination create unequal education, employment, and economic opportunities in Black, American Indian, and other communities of color. Combined 2016-2020 Minnesota PRAMS data by Federal Poverty Level (FPL) (Figure 2) showed that in Minnesota, low-income respondents (those at or below 185% FPL) practiced infant safe sleep at lower percentages than higher income respondents (those above 185% FPL). Forty-one percent of low-income PRAMS respondents placed their infant to sleep without soft objects or loose bedding compared to 66% of high-income respondents. Eighty-one percent of low-income respondents said their infant was placed to sleep on their back compared to 91% of high-income respondents. Thirty percent of low-income respondents compared to 49% of high-income respondents reported placing their infant to sleep on a separate approved sleep surface.

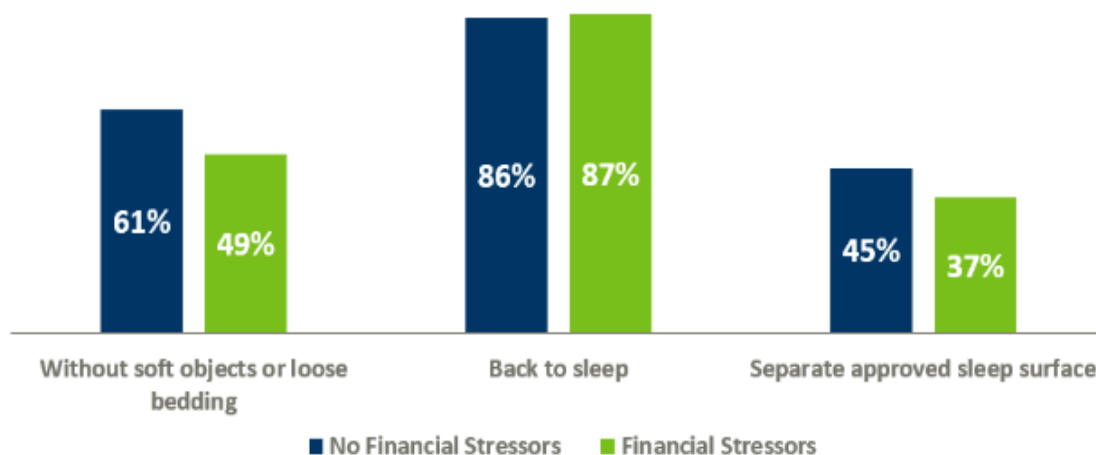
Figure 2- Safe Sleep Practices by Federal Poverty Level (FPL) 2016-2020



Financial stressors

On the Minnesota PRAMS survey, respondents who answered 'Yes' to: 'I moved to a new address' or, 'My husband or partner lost their job' or, 'I lost my job even though I wanted to go on working' or, 'My husband, partner, or I had a cut in work hours or pay' or, 'I had problems paying the rent, mortgage, or other bills', were coded as having financial stressors. Additionally, those who answered 'No' to one or more of the above questions, were coded as not having financial stressors. Analysis of combined 2016-2020 Minnesota PRAMS data by financial stressors (Figure 3) showed that there were differences seen between those who reported they did not have financial stressors and those who reported they had financial stressors. Specifically, 49% of respondents who had financial stressors placed their infant to sleep without soft objects or loose bedding compared to 61% of respondents who did not have financial stressors. Furthermore, 37% of respondents who had financial stressors, placed their infant to sleep on a separate approved sleep surface compared to 45% of respondents who did not have financial stressors.

Figure 3- Safe Sleep Practices by Financial Stressors 2016-2020

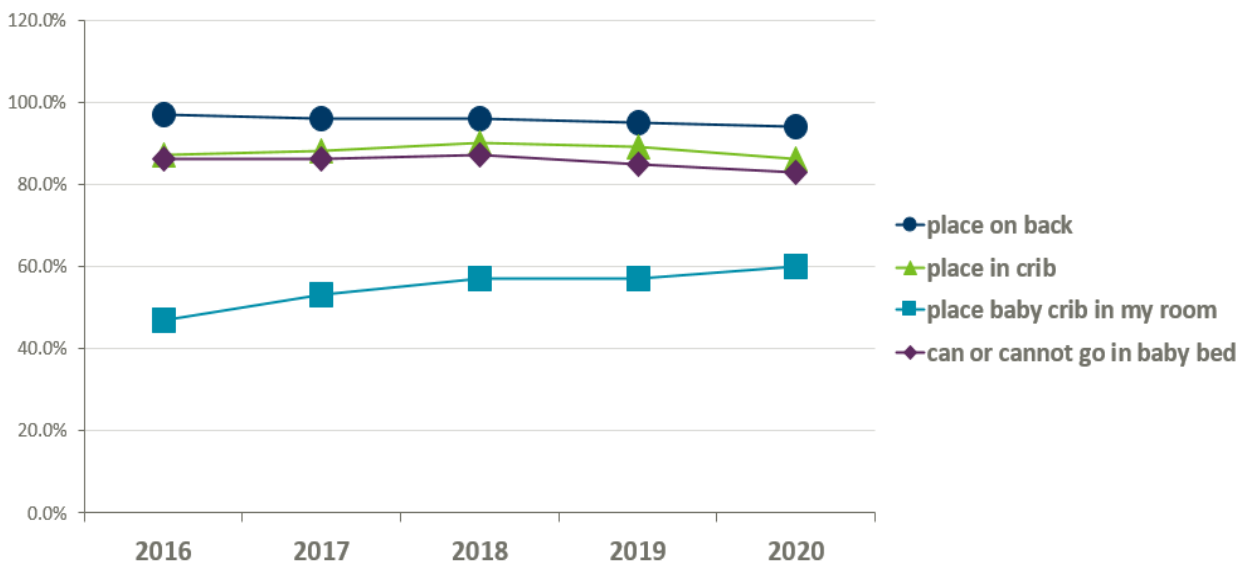


Safe sleep questions asked by provider, nurse, or other health care worker over time

MN PRAMS respondents were asked the following question: 'Did a doctor, nurse, or other health care worker tell you any of the following things?' Analysis of combined 2016-2020 data (Figure 5) showed that over time, doctors, nurses, or other health care workers consistently told them to place their baby to sleep on their back, told them to place their baby to sleep in a crib, bassinet, or pack and play, and told them what things should and should not go in bed with their baby. However, the percentage of MN PRAMS respondents reporting that doctors, nurses,

or other health care workers told them each of these three things decreased slightly from 2019 to 2020. Conversely, there was a steady increase from 2016 to 2020 when it came to respondents who said they were told to place their baby's crib or bed in their room. Specifically, in 2020, 60% of respondents reported that a doctor, nurse, or other health care worker told them to place their baby's crib or bed in their room compared to 47% in 2016.

Figure 5- Sleep Questions Asked by Doctor, Nurse, or Other Health Care Worker 2016-2020



Recommendations

Recommendations were drawn from several sources, including Academy of Pediatrics (AAP) Safe Sleep Recommendations, Title V Infant Mortality 2023 Plan, 2014 MDH Health Equity Report, and National Safe Sleep Hospital Certification Program. To increase awareness and uptake of AAP safe sleep recommendations public health efforts can:

- Eliminate inequities to ensure that all babies in our state have an equitable opportunity for a healthy life.
- Address social determinants of health to improve health and well-being.
- Improve safe sleep practices in child-care and hospital settings by training providers.
- Healthcare staff should educate parents and other trusted caregivers on infant safe sleep practices during prenatal care visits throughout the course of pregnancy as well as after delivery.
- Hospitals should become safe sleep certified. Hospitals can receive designation through the National Safe Sleep Hospital Certification Program, which promotes modeling and teaching infant safe sleep best practices to parents/caregivers before hospital discharge.

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- Prioritize, safe, affordable, and stable housing for Minnesota families.
- Use WIC and other programs that serve mothers and babies to deliver culturally appropriate messaging about safe sleep for babies.
- Continue Minnesota initiatives and campaigns around infant safe sleep education.
- Continue to provide supports needed to create safe sleeping environments. One activity the 34 [Positive Alternative](#) grantees provide statewide to participants is portable cribs as well as safe sleep education (link provided under resources).

Resources

- [Safe Sleep for Babies \(https://www.cdc.gov/vitalsigns/safesleep/\)](https://www.cdc.gov/vitalsigns/safesleep/)
- [How to Keep Your Sleeping Baby Safe- AAP Policy Explained \(https://www.healthychildren.org/English/ages-stages/baby/sleep/Pages/A-Parents-Guide-to-Safe-Sleep.aspx\)](https://www.healthychildren.org/English/ages-stages/baby/sleep/Pages/A-Parents-Guide-to-Safe-Sleep.aspx)
- [Ways to Reduce Baby's Risk for Sleep-Related Death \(https://safetosleep.nichd.nih.gov/safesleepbasics/risk/reduce\)](https://safetosleep.nichd.nih.gov/safesleepbasics/risk/reduce)
- [Safe Sleep information for Caregivers and Families \(https://safetosleep.nichd.nih.gov/resources/caregivers\)](https://safetosleep.nichd.nih.gov/resources/caregivers)
- [Safe Sleep Information for Dads \(https://safetosleep.nichd.nih.gov/resources/providers/downloadable/infographic_dads\)](https://safetosleep.nichd.nih.gov/resources/providers/downloadable/infographic_dads)
- [National Institutes of Child Health and Human Development \(NICHD\) Safe to Sleep Campaign \(https://safetosleep.nichd.nih.gov/\)](https://safetosleep.nichd.nih.gov/)
- [Positive Alternatives Locations- Includes information on sites where cribs are distributed \(https://www.health.state.mn.us/people/womeninfants/positivealt/locations.html\)](https://www.health.state.mn.us/people/womeninfants/positivealt/locations.html)
- [How Can We Help? \(https://www.211unitedway.org/\)](https://www.211unitedway.org/)
- [Infant Safe Sleep- Know the A-B-Cs quick cards \(https://www.health.state.mn.us/docs/people/womeninfants/infantmort/safesleep-eng.pdf\)](https://www.health.state.mn.us/docs/people/womeninfants/infantmort/safesleep-eng.pdf) -available in English, Spanish, Hmong, Somali, Karen, Russian, Oromo, and Amharic
- [Safe Sleep Frequently Asked Questions \(https://www.health.state.mn.us/docs/people/womeninfants/infantmort/safesleepfaq.pdf\)](https://www.health.state.mn.us/docs/people/womeninfants/infantmort/safesleepfaq.pdf)
- [Information and Resources \(https://starlegacyfoundation.org/\)](https://starlegacyfoundation.org/)
- [United States Consumer Product Safety Commission Recalls \(https://www.cpsc.gov/Recalls\)](https://www.cpsc.gov/Recalls)
- [United States Consumer Product Safety Commission Report, Search, Protect \(https://www.saferproducts.gov/\)](https://www.saferproducts.gov/)

References

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2. [Infant Mortality](https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm)
(<https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm>)
3. [Minnesota Department of Health: Pediatricians emphasize the ABCs of safe sleep](https://www.health.state.mn.us/news/pressrel/2022/safesleep111422.html)
(<https://www.health.state.mn.us/news/pressrel/2022/safesleep111422.html>)
4. Minnesota Department of Health: MDH linked birth/infant death file
5. [National Center for Fatality Review and Prevention, CDC SUID & SDY Case Registry](https://www.cdc.gov/sids/case-registry.htm)
(<https://www.cdc.gov/sids/case-registry.htm>)
6. [Sleep Objective MICH-14 Overview- Infants](https://health.gov/healthypeople/objectives-and-data/browse-objectives/infants/increase-proportion-infants-who-are-put-sleep-their-backs-mich-14) (<https://health.gov/healthypeople/objectives-and-data/browse-objectives/infants/increase-proportion-infants-who-are-put-sleep-their-backs-mich-14>)
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8. [U.S. Department of Health and Human Services Guidance Portal](https://www.hhs.gov/guidance/document/title-v-information-system)
(<https://www.hhs.gov/guidance/document/title-v-information-system>)
9. [Social Determinants of Health](https://www.cdc.gov/about/sdoh/index.html) (<https://www.cdc.gov/about/sdoh/index.html>)
10. [People in Poverty in Minnesota](https://data.web.health.state.mn.us/poverty_basic) (https://data.web.health.state.mn.us/poverty_basic)

Questions about safe sleep?

Contact the Maternal & Child Health Section: health.MCH@state.mn.us.

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Request data

For more information about requesting data, see [PRAMS Data](#)
(<https://www.health.state.mn.us/people/womeninfants/prams/datahtml>).

Data to action

We collect data on a wide variety of topics. Tell us about *your* PRAMS data story. We have a template that can help you. Your data story may be featured under Minnesota as a CDC PRAMS data to action success story, on the MN PRAMS website, or in our newsletter. You can email the PRAMS team: Health.MNPRAMS@state.mn.us

Order free PRAMS materials

You can help increase awareness of PRAMS by placing our posters and brochures in your clinic, hospital, or public space. Order materials today at [Minnesota PRAMS Promotional Materials Order Form \(https://survey.vovici.com/se/56206EE3022EAE4D\)](https://survey.vovici.com/se/56206EE3022EAE4D).

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