





Infant Feeding Practices Survey 2022

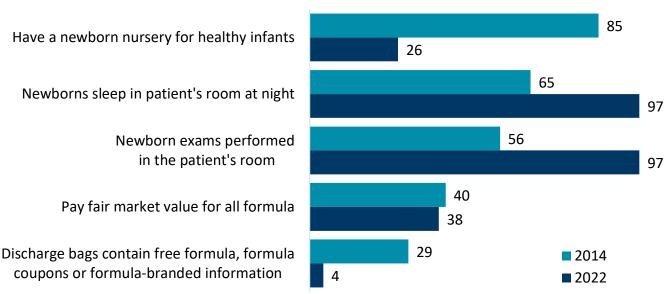
In 2022, the Minnesota Breastfeeding Coalition, with assistance from the Minnesota Department of Health, conducted its eighth Infant Feeding Practices Survey (IFPS), which asks Minnesota birthing facilities to report on their maternity care and infant feeding practices. In 2022, the facilities that completed the survey represented 85% of the births in the state.

The respondents included hospitals and free-standing birth centers. The number of facilities reporting more than five births/year in Minnesota declined from 98 in 2014 to 94 in 2021, with two more hospital-based birthing facility closures in 2022. The number of births in Minnesota have declined in recent years, from 69,916 in 2014 to 62,222 in 2021.¹

Evidence-based best practices

Many of the evidence-based best practices in maternity care services showed improvement from 2014 to 2022. Ninety seven percent of facilities reported more than 70% of newborn exams now occur in the patient's room, compared with 56% in 2014, and that is where most babies sleep at night; more than 70% of healthy term infants room in, compared with 65% in 2014. A significant percentage of hospitals still do not pay fair market value for formula, but there was a decrease in the percentage of hospitals giving out discharge bags containing formula, formula coupons, or formula-branded information to their patients.

Percentage of evidence-based best practices in maternity care



In 2022, 36 facilities reported on their exclusive breastfeeding rate. The median rate reported was 73% (interquartile range 60 – 90) of newborns exclusively breastfed on discharge.

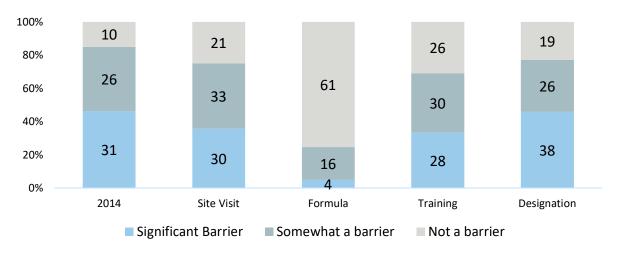
Baby-Friendly Hospital Initiative in Minnesota

The <u>Baby-Friendly Hospital Initiative</u> (BFHI) launched in 1991 to implement practices that protect, promote and support breastfeeding.² There are 600 Baby-Friendly facilities in the U.S., 14 of which are in Minnesota. In 2014, four survey respondents (4%) were BFHI certified and 16 (17%) were on the 4D Pathway, while in 2022 12 respondents (19%) were BFHI certified but none were on the 4D Pathway for certification.³ Over the past eight years, health systems have consolidated, smaller hospitals have closed maternity centers, and institutional leadership support for the BFHI has in several cases been withdrawn.

Barriers to pursuing Baby-Friendly certification

The IFP Survey asked hospitals and birth centers about their barriers to achieving Baby-Friendly certification. During the 2014 survey, there was only one general question about whether the cost of BFHI designation was identified as a barrier and 31% of the hospitals or birth centers reporting that cost was a significant barrier. In the 2022 survey, survey respondents were asked about four categories of cost: the cost of site visits, paying fair market value for formula, staff training, and Baby-Friendly USA designation.

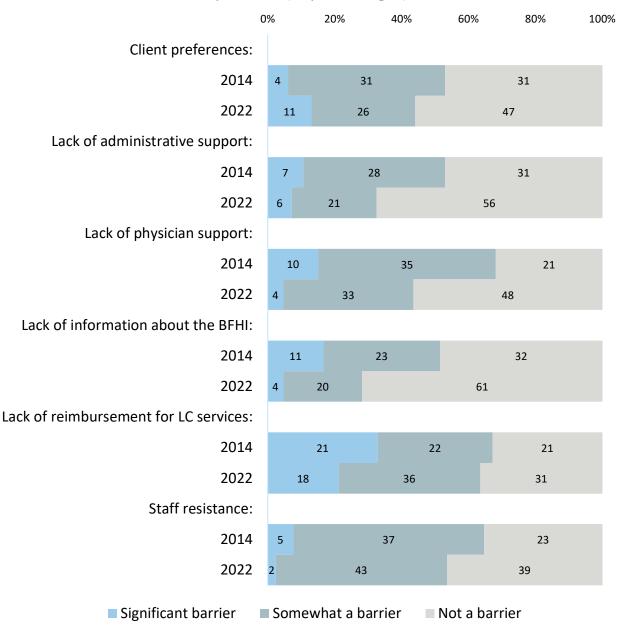
How much of a barrier is cost or the cost of the following items when initiating the Baby-Friendly certification process?



Other barriers to initiating the Baby-Friendly certification process include client preferences, lack of administrative support, lack of physician support, lack of information about the initiative, lack of reimbursement for lactation services, and staff resistance.

Since 2014, the most reported significant barrier has been the lack of reimbursement for lactation services, with this barrier only slightly less significant in 2022. Overall, the percentage of reported barriers has declined in every category since 2014. Perception of administrative and physician support has improved, as has knowledge of the designation, while client preference and staff resistance have shown only modest improvement.

How much of a barrier are / were the following items to your hospital or birth center initiating the Baby- Friendly certification process? (In percentages)

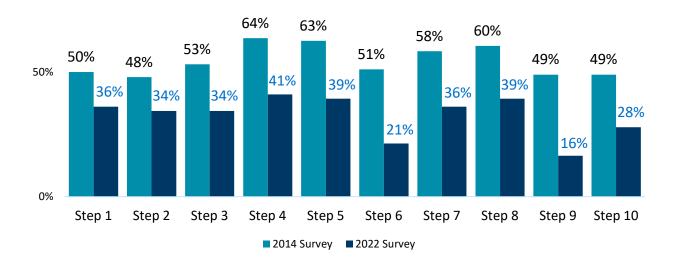


The Ten Steps to Successful Breastfeeding

Compared to 2014, fewer facilities reported working on the <u>Ten Steps to Successful Breastfeeding</u>⁴. In 2014, 67 (70%) of facilities reported they were working on at least one of the Ten Steps, while in 2022 only 25 (40%) reported working on at least one step.

Facility reported working on Steps in the Ten Steps

100%



As Minnesota enters the post-pandemic era, the Minnesota Department of Health, in collaboration with the Minnesota Breastfeeding Coalition, is encouraging birthing facilities to return to quality-improvement efforts in best practices for infant feeding. MDH offers the Breastfeeding Friendly Birth Center (BFFBC) Recognition program,⁵ and the MBC offers the 10 Step Learning Collaborative (10-SLC). The BFFBC recognition program is meant to encourage adoption of environments, policies, and practices conducive to breastfeeding in hospitals and birth centers, and provides recognition for taking steps toward breastfeeding excellence. The 10-SLC, a quality improvement community, meets monthly to support each other to close the gap between actual practices and evidence-based practices as the standard of care.

Pasteurized Donor Human Milk

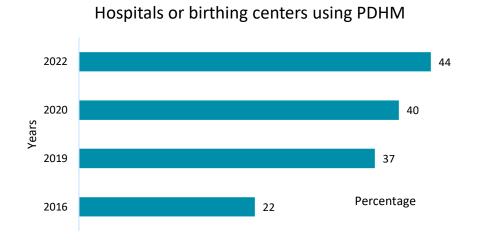
Pasteurized Donor Human Milk (PDHM) is donated breast milk that comes from a milk bank and is processed specifically for the needs of newborn babies. The Minnesota Breastfeeding Coalition's Infant Feeding Practices Survey (IFPS) expanded in 2022 to collect more information on the policies and usage of donor milk within hospitals and birthing facilities. In addition, in-depth interviews with lactation care providers delved more deeply into current perceptions, practices, and concerns around donor milk.

Infant Feeding Practices Survey

Of the 62 hospitals and birth centers who responded to the 2022 IFPS, 27 (44%) reported using Pasteurized Donor Human Milk. Those who reported using PDHM responded to an additional series of questions.

Availability of PDHM

The percentage of facilities providing donor milk for newborns who need supplementation has doubled in the past 6 years, with nearly half of facilities using PDHM for supplementation.



Facilities that reported providing donor milk included five of the six Minnesota Level II nurseries and six of the state's eight Level III nurseries. (The four Level IV nurseries in Minnesota are not birthing facilities.) An additional 16 hospitals without special care nurseries reported providing donor milk, for a total of 27 facilities. All but one facility reported having a written policy for use of PDHM.

Breastmilk fortifiers can be used to meet nutritional needs for premature infants or infants in special care nurseries. Twelve of the 27 (44%) facilities reported using a human-milk based fortifier, six of the 27 (22%) use a cows-milk based fortifier, and 10 of the 27 (37%) facilities reported using neither or not using a fortifier.

PDHM for healthy newborns

Twenty-four out of 27 (89%) of facilities using donor milk provide it to healthy newborns. The criteria for PDHM eligibility varied by facility, but for healthy newborns to receive donor milk, 20 of the 23 (87%) responding facilities reported requiring parental consent.

Accessibility of donor milk

Key ethical considerations concerning receipt of donor milk include:

- Determining who receives donor milk in times of scarcity.
- Ensuring that access to donor milk is equitable.
- Ensuring donor milk is used appropriately so it acts as a bridge to support breastfeeding without displacing mother's own milk (MOM) and without negatively impacting the lactating parent's milk supply.⁷



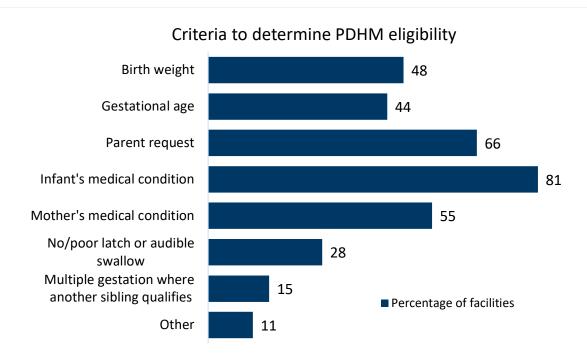
Infants in Neonatal intensive care units (NICUS) are at greater risk of morbidity and mortality from severe digestive complications, infections, and delayed growth or development compared to full-term or healthy infants. For this reason, the World Health Organization recommends safe use of donor human milk as a key risk reduction strategy. ⁷

Donor milk is the next best option to MOM but is not made available to every infant. Hospitals prioritize the most vulnerable newborns to receive donor milk but vary in their policies and practices as to who receives donor milk, especially for healthy newborns. In Minnesota, the Minnesota Milk Bank for Babies has had to prioritize hospital inpatients due to the dramatic increase in demand for PDHM resulting from the 2022 infant formula shortage. Hospital policies and cost considerations also play a role in limiting access to PDHM, in ways that are not necessarily equitable.

Overuse of donor milk may interfere with the establishment of an adequate milk supply for the mother. It's important that PDHM be provided in a way that protects, promotes, and supports breastfeeding. Recipients of donor milk should be provided comprehensive lactation support, including quality breast pumps or other necessary equipment and supplies, ongoing lactation consultation services, and community supports post discharge.

Eligibility to receive donor milk

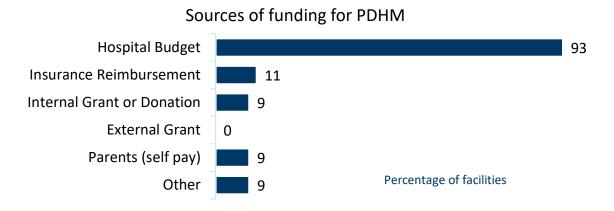
Hospitals' and birth centers' policies and practices on who received PDHM varied, especially for healthy term newborns. PDHM was most consistently provided to medically fragile infants.



Most facilities utilizing donor milk reported providing both verbal (89%) and written (85%) education on breast milk, breastfeeding, or PDHM. About one in three (34%) will connect parents to a milk bank to acquire PDHM post discharge or post eligibility period and 33% of the hospitals provided donor milk to some patients at discharge.

Paying for donor milk

Hospitals reported paying for PDHM mainly with hospital budget funds. Only about one in ten facilities recoup costs through insurance reimbursement, internal grants, and/or patient self-pay (out-of-pocket payment).



In-Depth Interviews

To better understand the reasons behind the policies and practices enumerated in the IFP Survey, indepth interviews were conducted with nine lactation care providers and two community peer counselors. The in-depth interviews included questions about provider perspectives and equity in PDHM recipients. Themes revealed included donor milk accessibility, perceptions of PDHM, communication of information about PDHM, policies limiting access to donor milk, diversity, and provider concerns.

Interview participants expressed that provider advocacy would make a large difference in PDHM use for patients who are not familiar with it, but extensive knowledge on donor breast milk is limited mainly to the lactation consultants. One interviewee stated:

"I think very few providers actually [...] have an understanding of donor breast milk. Whether it's practitioners, whether it's like our regular pediatricians up on the floor up in NICU, lots of times we're hearing things like, 'it's really watered down', 'we don't know how many calories are in it', even though it's tested and labeled with the calories."

Another barrier to recommending PDHM to patients. mentioned by all the interviewees, was hesitancy to suggest donor milk to families when there were doubts that the family could afford donor milk.

"There's no cost to it in the hospital, so if babies are in the hospital, it's free. But after they get out, it's just super expensive. [...] it's out of reach for most people."

Donor milk is significantly more expensive than formula, is not obtainable through programs such as WIC, and is typically not covered by insurance. Regarding the cost of PDHM, one interviewee recalled:

"She was trying to look into how to afford pasteurized donor milk and what the cost would look like and how many ounces per day her baby needs. And they're doing all these calculations, and just at the end, it just wasn't financially feasible in the long term."

The Minnesota Milk Bank for Babies may have more information on sources for obtaining PDHM at low or no cost.

In addition to cost being a main concern, some cultures, specifically the Somali Muslim patients, had religious concerns about PDHM and milk kinship. Culture of the patient was mentioned by multiple interviewees, with one stating:

"One thing I have seen is that sometimes, the nurses just go in a room, and they just assume anyone that looks even, like, vaguely East African, they will just assume that they're Muslim, and then not offer donor milk as an option."

Equity in policy and practices for PDHM recipients differs by hospital and birth center, as some make it available to all babies and some only to pre-term and ill infants. Most of the facilities only gave PDHM if the mother was actively working on establishing their own supply and planning to exclusively breastfeed at home. Parents who request donor milk are also more likely to receive it, which means more affluent families, who tend to be more knowledgeable about donor milk, are more likely to receive it.

References

- 1. Minnesota Vital Records (unpublished)
- 2. The Baby-Friendly Hospital Initiative (https://www.babyfriendlyusa.org/about/)
- 3. List of Baby-Friendly-accredited hospitals: https://www.babyfriendlyusa.org/for-parents/baby-friendly-facilities-by-state/
- 4. <u>The Ten Steps to Successful Breastfeeding:</u> (https://www.babyfriendlyusa.org/for-facilities/practice-guidelines/10-steps-and-international-code/)
- 5. <u>Breastfeeding Friendly Birth Center (BFFBC) Recognition program</u> (https://www.health.state.mn.us/people/breastfeeding/recognition/birthcenters.html)
- 6. United States breastfeeding and supplementation rates: <u>Breastfeeding Report Card, 2022 CDC</u> (https://www.cdc.gov/breastfeeding/pdf/2022-breastfeeding-report-card-h.pdf)
- Israel-Ballard, K., Cohen, J., Mansen, K., Parker, M., Engmann, C., Kelley, M., ... & Zambrano, P. A. (2019). Call to action for equitable access to human milk for vulnerable infants. The Lancet Global Health, 7(11), e1484-e1486.
 - https://www.thelancet.com/journals/langlo/article/PIIS2214109X(19)30402-4/fulltext
- 8. Fengler, J., Heckmann, M., Lange, A., Kramer, A., & Flessa, S. (2020). Cost analysis showed that feeding preterm infants with donor human milk was significantly more expensive than mother's milk or formula. Acta paediatrica (Oslo, Norway: 1992), 109(5), 959–966. https://doi.org/10.1111/apa.15087
- 9. Minnesota Milk Bank for Babies (mnmilkbank.org)

Revised 12/21/2022