



# Best Practice Guidelines To Support Breastfeeding in the NICU

## 10 Ps for Practice



Developed by the Michigan Breastfeeding Network,  
a subcommittee of Michigan Healthy Mothers, Healthy Babies

Breastfeeding of premature or sick babies offers unique challenges. This document identifies ten practices to support breastfeeding in neonatal intensive care units (NICUs). It includes practices that promote human milk as the primary source of nourishment and practices that help transition the baby to effective breastfeeding. These guidelines are applicable to preterm babies as well as sick term babies.

### **POLICY**

A written policy is developed by a multi-disciplinary team and communicated to all NICU personnel and families.<sup>1-3</sup>

1. Include in this policy:
  - “Human milk is the preferred feeding for all infants, including premature and sick infants, with rare exceptions.”<sup>1,4-8</sup>
  - Detailed information on the collection, storage, labeling, transport, identification, and feeding of expressed human milk.<sup>1,3,9</sup>
  - Management guidelines for transitioning baby to effective breastfeeding.
  - A plan for regular monitoring of breastfeeding rates, practices and outcomes.
2. Environmental factors in the NICU are important for facilitating breastfeeding. The policy needs to:
  - Restrict the use of formula marketing items, educational materials and logos.<sup>7</sup>
  - Ensure sufficient and safe refrigerator/freezer storage space for the expressed milk.<sup>7</sup>
  - Provide an adequate number of hospital-grade electric pumps.
  - Offer flexible visiting hours to facilitate frequent breastfeeding sessions for the mother.<sup>7</sup>

### **PERSONNEL EDUCATION**

All personnel involved in the care of NICU babies receive comprehensive on-going training and evaluation of basic competencies and skills necessary to implement the policy<sup>1,10-14</sup>

1. This training includes:
  - Value of human milk for all babies in the NICU.<sup>1,4-8,10</sup>
  - Importance of on-going support for breastfeeding mothers with NICU babies.<sup>3,7,10-11,13-14</sup>
  - Management guidelines to establish and maintain each mother’s milk supply, including regular monitoring with appropriate interventions if the supply is inadequate.<sup>4,9,11,16</sup>
  - Management guidelines for progression of baby to effective feeding at the breast.<sup>11,17</sup>
  - Clear and consistent documentation of type of milk fed, delivery method used and assessment of baby at the breast.<sup>1,7,11</sup>

- Resources to evaluate mother's medications for safety and impact upon providing her milk to her baby. <sup>7,18-19</sup>
- 2. Each care provider is responsible for implementing the policy and is accountable for the breastfeeding outcomes. <sup>20</sup>

## **PARENT EDUCATION**

Health care professionals encourage and inform mothers of NICU babies and their support networks about the benefits and management of breastfeeding. <sup>1,5,13-15,21</sup>

1. Review the importance of human milk and breastfeeding with parents, if a premature birth is anticipated. <sup>1,4-8,10,15,22</sup>
2. Discuss the option of pumping and providing human milk via bottles if the mother does not want to put her baby to breast. <sup>1,10,15</sup>
3. Teach families how to initiate and maintain the mother's milk supply. <sup>1,4,7,16,23</sup>
4. Provide on-going instruction on how to progress the baby to effective feeding at the breast. <sup>3,10-11,15,17</sup>
5. Use evidence-based, appropriate videos and written materials that do not promote formula for parent education. <sup>7</sup>
6. Review with mother her medications and reassure her regarding safety of providing her milk to her baby. <sup>7,15,18</sup>

## **PROTECT THE MILK SUPPLY**

Breastfeeding or human milk expression is initiated early and is done frequently and consistently with easy access to efficient breast pumps. <sup>6,9-10,15-16,22-23</sup>

1. A hospital-grade automatic electric pump with a double collection kit is essential for establishing and maintaining a milk supply. <sup>4,7,15,22,24</sup>
2. Begin pumping within 6-12 hours of delivery. <sup>4,7,11,16,22-25</sup>
3. Pumping frequency and volume collected needs to mimic or surpass the feeding pattern and intake of a healthy term baby. Aim for 8-12 pumpings per 24 hours. <sup>4,11,15-16,22-23</sup>
4. Encourage mother to pump at the baby's bedside whenever possible. <sup>4,7</sup>
5. Continue pumping to maintain the milk supply in rare situations when the mother needs to temporarily use a medication contraindicated when breastfeeding. The pumped milk would not be used.
6. Arrange for rental of a hospital-grade automatic electric pump for use at home by the mother. <sup>7,15</sup>
7. Work with third party insurance companies for consistent reimbursement for pump rentals. <sup>7</sup>

## **PLAN**

An individualized written feeding plan is developed that begins at admission and continues until baby transitions to effective feeding at the breast. <sup>1,6,10-11,22,26-27</sup>

1. The expectation for feedings should include the use of human milk for the first feedings and extend to meeting the mother's goal for breastfeeding post-discharge. <sup>1,4,11,21</sup>
2. This plan includes the following steps:
  - a. Inform mother of the medical importance of human milk for her baby. <sup>1,4,6-7,10</sup>

- b. Establish an ample milk supply sufficient to meet or surpass the needs of a term baby. <sup>4,7,15</sup>
- c. Encourage early and frequent skin-to-skin/Kangaroo Care, accompanied by naso-gastric feeds when appropriate. <sup>1,4,7,10,15,17,24-25,28</sup>
- d. Provide frequent opportunities for non-nutritive sucking at breast. <sup>7,10,13,15</sup>
- e. Ensure that first oral feedings are at the breast. <sup>15,22</sup>
- f. Encourage frequent practice sessions at breast. <sup>15,22</sup>
- g. Assess and document progress of baby's feeding at breast. <sup>11,22,24</sup>
- h. Assess intake with the use of pre and post-feeding test weights. <sup>10,22,24-26</sup>
- i. Use a nipple shield, supplemental nursing system or other strategies to enhance milk intake at the breast, if necessary. <sup>15,24-26</sup>
- j. Delay use of bottles as long as possible so baby has many opportunities to practice feeding at breast. <sup>4,17</sup>
- k. Develop a "Transition to Home Breastfeeding Plan" in collaboration with a lactation consultant. <sup>11,29</sup>
- l. Refer to community lactation services and support groups for on-going help and assessment post-discharge.

### **PRIORITY**

Human milk is the primary source of nutrition for all NICU babies. <sup>1,5,6,9-10,12,17,21-22,25</sup>

1. Fortified human milk is preferred to special care formulas. Policy reflects criteria for use of human milk fortifiers. <sup>1</sup>
2. Use lacto-engineering methods (e.g. creamatocrits, hindmilk feedings) to increase the caloric content of the mother's milk. <sup>1,10,27,30</sup>

### **PARENT POWER**

Mother and family are empowered to be involved in baby's care and feeding through close and frequent contact throughout the hospital stay. <sup>6,10,15,27</sup>

1. Recognize that the mother is an integral part of baby's care. Her contribution is unique because only her milk provides protection against infection. <sup>4,10,14</sup>
2. Encourage parents to visit, participate in baby's care and practice breastfeeding as early and often as possible.
3. Enable parents to recognize their baby's cues for feeding and stress.
4. Teach mothers to recognize effective latch and milk transfer. <sup>4,15</sup>

### **PRACTICE**

Mother and baby are given the opportunity and encouragement for frequent practice at breast prior to discharge home. <sup>4,6,10,15</sup>

1. Encourage licking and non-nutritive sucking when baby is in skin-to-skin/Kangaroo Care. <sup>10,15,28</sup>
2. Encourage early non-nutritive breastfeeding during naso-gastric intermittent feedings. <sup>15</sup>
3. Early oral feedings are exclusively at breast.
4. Delay other oral feeding methods (bottle, cup or syringe) until one week prior to anticipated discharge. <sup>17,31</sup>
5. Ask mother to be present for as many feedings as possible.
6. Provide mother with opportunities for 24-hour rooming-in prior to baby's discharge home. <sup>3-4</sup>

## POST DISCHARGE

Outpatient support is provided post-discharge for assisting mother in reaching her breastfeeding goals.<sup>1,4,10,13,26-27,32</sup>

1. Arrange routine follow-up appointments with a lactation consultant or breastfeeding peer counselor with expertise in premature/sick babies.<sup>4,7,10-11,13,15,22,24,29,33</sup>
2. Refer mother to community breastfeeding support groups.<sup>3,14</sup>
3. Collaborate with mother to develop a written post-discharge breastfeeding plan.<sup>4,7,10-11,22,33</sup>
4. Provide accurate written information to the primary care provider and community lactation consultant about mother's milk supply, milk intake, percentage of feedings done at breast, supplementation method used, etc.<sup>1,7,10-11,22,24,29,33</sup>

## PROGRESSION TOWARD BEST PRACTICE

Breastfeeding practice and outcome goals are established, regularly monitored and reevaluated. A plan to meet these goals is developed and implemented by a multidisciplinary team.<sup>7,14</sup>

1. The NICU team develops a system to monitor, on a regular basis:<sup>15,30</sup>
  - Rates of human milk initiation.
  - Percentage of human milk feedings at discharge.
  - Discharge level of feeding at breast (full, partial, token).
  - Post-discharge durations for breastfeeding and/or human milk feeding.
2. Evaluate staff practice toward meeting outcome goals.
3. Recognize staff members who provide optimal breastfeeding support.

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