Pumping: Topic of the Month

AUGUST 7, 2024

The majority of lactating parents express their milk at some point during their breastfeeding journey. The reasons for expressing human milk can vary from building up a freezer stash, increasing milk supply, having milk for others to feed baby, being away from baby for work/school, or inability to feed baby directly from the breast/chest. This memo will help staff support our pumping participants at WIC.

Supporting families

WIC staff have many tools to support families who are pumping human milk for their infants. The first tool is the WIC Nutrition Assessment. The nutrition assessment provides the opportunity to probe and determine how things are going, and what additional support may be needed.

When assisting a pumping participant, first assess the reasons why pumping is needed or wanted. Assess if a participant is exclusively pumping or pumping and feeding directly from the breast or chest. Assess for a participant's knowledge and strengths and areas where they need information or help. Using this assessment method, WIC staff are able to individualize pumping education and support to meet the unique needs of each family.

Guidelines and scope of practice

When supporting pumping, WIC Peer Counselors, CPAs, and DBEs should develop a plan for pumping to maintain adequate milk production. Plans should include:

- Frequency of pumping
- Pumping location (home or work)
- Length of pumping sessions
- Duration of the pumping plan
- Instructions about the importance of keeping the pump clean.

CPAs and Peers should refer complex lactation issues and concerns to the DBE.

Common pumping concerns

Milk supply

Many pumping participants are concerned about milk supply. Milk supply concerns may have prompted a parent to start pumping to increase supply, or frequent pumping may have caused an oversupply for some individuals.

- WIC staff can support pumping participants in maintaining an adequate supply after assessing the situation. The pumping plan may need to increase the frequency of pumps for a participant with low milk supply or decrease the frequency for an oversupply.

Some participants may have difficulty maintaining a full supply when exclusively pumping.

- Assess if direct breastfeeding is an option for the family. If so, encourage continued breastfeeding at the breast. If appropriate, suggest they limit pumping to only those times when the parent and baby are apart.

If a participant plans to exclusively pump, encourage early initiation of pumping after birth and frequent pump sessions afterwards to establish milk supply.

- Studies have shown with pre-term infants that early initiation and frequent pump sessions (at least six in 24 hrs.) may increase the establishment of a full milk supply when exclusively pumping. Participants who plan to establish lactation with exclusive pumping could also explore renting a hospital grade pump to support initiation.

Nighttime expression is required to maintain full milk capacity during early lactation. The length of time between pump sessions at night depends on the storage capacity of the parent and frequency at which the baby is eating.

Hand expression and hands on pumping

Studies show that parents who use hand expression in the early days of breastfeeding significantly increase their milk production. Parents who are pumping will collect more breast milk if pumping sessions are followed by hand expression. Reassure parents that hand expression gets easier with some practice. They may only express a few drops in the beginning, but with continued efforts, it becomes easier, and the volume will increase.

Other reasons for hand expression:

- To soften breasts if they are too full for the baby to latch on well.
- To help increase milk production.
- To maximize the collection of milk from pumping, as mentioned above.
- To remove milk when a pump is unavailable.
- For personal comfort reasons, for times when the baby has a smaller feeding, or if they are temporarily away from the baby.
- To collect breast milk for future feedings when they will be away from their baby.

WIC staff can teach hand expression using breast models, diagrams, handouts, or videos. See the resource links section below for tools to support staff and participants.

Breast and nipple pain

Incorrect sizing of breast shields is the most common cause of pain with pumping. Support participants in sizing nipples and selecting the best flange size for them.

Other causes of pain could be:

- Pump settings: vacuum too high or cycle too fast/slow.
- Dermatitis from chemicals used to clean pump or ointments.
- Vasospasm
- Overproduction or swelling

Safe handling of milk and cleaning pump parts

Maintaining a clean pump kit and pumping environment is important when expressing human milk. Pumping milk creates an opportunity for exposure to microorganisms and contaminants. WIC staff can provide anticipatory guidance on the safe handling of breast milk when participants plan to pump. WIC staff can also educate pumping participants on the safest way to keep their pumps clean and their milk safe.

Before pumping

- Wash hands with soap and water.
- Clean the pumping area by wiping with cleaner or disinfectant wipes.
- Assemble a clean pump kit.

After pumping

- Store the milk safely. Label milk and immediately put in a refrigerator, freezer, or cooler bag with ice packs.
- Clean the pumping area by wiping with cleaner or disinfectant wipes.
- Take apart and inspect the pump kit.
- Rinse and clean the pump kit. Clean all parts of the pump kit that come into contact with milk using dish soap and water.
- Store the clean, dry pump parts in a clean, protected area until the next use.

Sanitizing

- For extra germ removal, sanitize pump parts and cleaning basins and brushes.

- Items can be sanitized using steam, boiling water, or a dishwasher sanitizing cycle.
- Sanitizing is especially important for infants less than two months old, babies born prematurely, and babies with a weakened immune system.

WIC staff and participants should learn about the specific models of pumps that are being used for additional cleaning information.

Storing breast milk after expressing

Use breast milk storage bags or clean, food-grade containers to store expressed breast milk. Make sure the containers are made of glass or plastic and have tight fitting lids.

Store freshly expressed or pumped milk:

- At room temperature (77°F or colder) for **up to four hours**.
- In the refrigerator for **up to four days**.
- In the **freezer for about six months is best; up to 12 months is acceptable**. Recommended storage times are important to follow for best quality.

Never store breast milk in disposable bottle liners or plastic bags that are not intended for storing breast milk.

Paced bottle feeding

Pumping parents may be discouraged when babies are using more milk than the parent can pump. Many parents expect to have a large freezer stash, but this is unrealistic for most families. The most common situation is where a parent is pumping just enough milk for their baby to drink while they are separated.

Parents can help caregivers make the most of their pumped milk by instructing them to use paced bottle feeding. This feeding technique reduces overfeeding, allows babies more control over how much they eat, and allows babies to take breaks like when they're breastfeeding at the chest.

How to pace bottle-feed

1. Hold your baby semi-upright. Position your baby at a 45-degree angle with their head and neck aligned, supporting their head in the crook of your arm. You can tuck a pillow under your arm for some extra support.
2. Give the baby's mouth a little tickle for a good latch. Encourage the baby to open their mouth wide by gently tickling their lip with your finger, then put the nipple in their mouth.

3. Hold the bottle parallel to the ground. When you're ready to start feeding, tilt it upwards just slightly. This will encourage your baby to work for the milk and prevent too much liquid from flowing out at once.
4. Let your baby sip for a bit, then give them a break. Give your baby a chance to drink for 20 to 30 seconds. Then lower the bottle so it's parallel to the ground (the nipple can stay in her mouth) to give baby a short break.
5. Repeat until baby is satisfied, paying attention to fullness cues. The entire feeding session will likely take between 15 and 30 minutes. You'll know your baby has had enough when they don't go back for more after a break or turn away from the bottle.
6. Let your baby take the lead. It won't be long before your baby starts deciding when to take drinking breaks on their own. When baby does, go with the flow!

Getting a pump

The majority of WIC participants in Minnesota obtain a pump through Medical Assistance or private medical insurance. Medical Assistance coverage provides *one double electric breast pump per pregnancy* and can cover the rental of medical grade pumps in certain circumstances.

Information about obtaining a pump can be found by calling the customer service number on the back of the medical card or talking to clinic or hospital staff about pump coverage.

Breast pumps are an allowed expense for the WIC grant. Talk to your supervisor about what breast pumps your agency has in stock to provide to participants in need. Whenever issuing a pump through WIC, document the issuance and reason in the WIC Information System.

Resources links:

Hand expression:

Hand Expression (Droplet, 2023)

Expressing the First Milk - Small Baby Series (Global Health Media Project, 2017)

How to Express Your First Milk (Spanish) - Small Baby Series (Global Health Media Project, 2017)

Hand Expression of Breastmilk handout (Lactation Education Resources, 2021)

- Other languages available here: Parents Handouts

Learning to Pump and Hand Express Milk | WIC Breastfeeding Support (WIC Breastfeeding Support United States Department of Agriculture (USDA))

Making Milk Expression Work for You | WIC Breastfeeding Support (WIC Breastfeeding Support USDA)

Maximizing Milk Production with Hands on Pumping (Stanford Medicine, 2017)

Cleaning pump and milk handling:

About Breast Pump Hygiene (Center for Disease Control and Prevention (CDC), 2024)

Breast Milk Storage and Preparation (CDC, 2023)

How to Clean, Sanitize, and Store Infant Feeding Items Frequently Asked Questions (CDC, 2024)

How to Keep Your Breast Pump Kit Clean (CDC. 2023)

Human Milk Storage Guidelines (MDH WIC, 2020)

Paced bottle feeding and Baby Behavior

Paced Bottle Feeding -For participants (IABLE, 2017)

Paced Bottle Feeding Captioned -For staff (Emerald Doulas, 2016)

WIC Baby Behaviors (MDH WIC)

MN WIC Baby Behavior Education Videos (MDH WIC)

Baby Behavior Participant Resources (MDH WIC)

Breast pump information

Breast Pumps: Orders and Claims Process (MDH WIC)

Flange fitting

How to Choose the right personal fit breast shield (Medela, 2019)

The Ultimate Flange Sizing Guide (Genuine Lactation, 2022)

References - complete listing of hyperlinks:

WIC Nutrition Assessment (www.health.state.mn.us/people/wic/localagency/training/na.html#NaN)

Hand Expression (firstdroplets.com/downloads/#video-3)

Expressing the First Milk - Small Baby Series (www.youtube.com/watch?v=85l3rpsjyC4)

How to Express Your First Milk (Spanish) - Small Baby Series (https://www.youtube.com/watch?v=WmEqKgCnalc)

Hand Expression of Breastmilk (www.lactationtraining.com/resources/handouts-parents?task=document.viewdoc&id=31)

Parents Handouts (www.lactationtraining.com/resources/handouts-parents)

Learning to Pump and Hand Express Milk | WIC Breastfeeding Support (wicbreastfeeding.fns.usda.gov/learning-pump-and-hand-express-milk)

Making Milk Expression Work for You | WIC Breastfeeding Support (wicbreastfeeding.fns.usda.gov/making-milk-expression-work-

you#:~:text=Expressing%20milk%20is%20an%20important,and%20building%20your%20milk%20supply.)

Maximizing Milk Production with Hands on Pumping (med.stanford.edu/newborns/professional-education/breastfeeding/maximizing-milk-production.html)

About Breast Pump Hygiene (www.cdc.gov/hygiene/about/about-breast-pump-hygiene.html)

Breast Milk Storage and Preparation (www.cdc.gov/breastfeeding/breast-milk-preparation-and-storage/handling-breastmilk.html)

How to Clean, Sanitize, and Store Infant Feeding Items Frequently Asked Questions (www.cdc.gov/hygiene/faq/index.html)

How to Keep Your Breast Pump Kit Clean (www.cdc.gov/hygiene/pdf/breastpumpkit-clean-508.pdf)

Human Milk Storage Guidelines (www.health.state.mn.us/docs/people/wic/localagency/bf/storage2.pdf)

Paced Bottle Feeding (www.youtube.com/watch?v=OGPm5SpLxXY)

Paced Bottle Feeding Captioned (www.youtube.com/watch?v=KY8ct80VqaE)

WIC Baby Behaviors (www.health.state.mn.us/people/wic/localagency/training/bb.html)

MN WIC Baby Behavior Education (www.youtube.com/watch?app=desktop&v=lLUJV0QLAiY&list=PLnv1INVkmxmtYaMmowS5oBHnbgmps7Ai1)

Baby Behavior Participant Resources (www.health.state.mn.us/people/wic/nutrition/tips.html%23bb)

Breast Pumps: Orders and Claims Process (www.health.state.mn.us/people/wic/localagency/breastpumps.html)

How to Choose the right personal fit breast shield (www.youtube.com/watch?v=EWFUB-4gOSw&t=31s)

The Ultimate Flange Sizing Guide (www.genuinelactation.com/flange-sizing)

Minnesota Department of Health - WIC Program, 625 Robert St N, PO BOX 64975, ST PAUL MN 55164-0975; 1-800-657-3942, health.wic@state.mn.us, www.health.state.mn.us; to obtain this information in a different format, call: 1-800-657-3942.

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