

Cleaning Equipment, and the Storage and Transport of Mother's Milk

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Before you express or pump your milk to store or transport it always:

- Wash hands well with soap and water.
- Clean under your finger nails.
- Dry hands with paper towels.
- Make sure all equipment is clean and dry.

Containers

In hospital

- Use hard plastic bottles (containers).
- Express into a new container each time.

At home

1. For NICU babies in hospital:
 - Use containers supplied by the hospital to store your milk in. Label with hospital labels.
 - Use a new bottle for each pumping.
2. For healthy babies at home:
 - Use small clean glass or plastic containers with a solid lid, bottle liners or milk storage bags.
 - Double bag when using bottle liners or milk storage bags. Use twist ties to close the bags. Do not use "baggies".
 - If adding milk to a container, chill the fresh milk first then add to the cold milk.

Labels

In hospital:

The best and safest milk to give is your milk. These tips will help ensure your baby gets your milk.

- Use the preprinted labels given to you while you or your baby are in the hospital.
- Label all containers with your baby's name, and the date and time you expressed.
- Place milk in your labeled bin in fridge or freezer.
- Check the label of the bottle of milk before giving milk to your baby.

- When you defrost frozen milk, write the date and time it was defrosted on the label before placing in the fridge or keeping at the bedside.

At home

- Write the date you expressed the milk on tape and attach to the container.
- For NICU babies, use the bottles and labels you are given by the hospital.

Storage

- Store milk in the back of the fridge or freezer.
- Do not store milk in the door of the fridge or freezer.
- Leave space in the container so the milk can expand when freezing.
- Package expressed milk in feeding size portions.

For babies in the NICU please:

- Ask for a "Mother's Milk Diary".
- **Put a green dot on the lid of each bottle of milk if it was pumped during the first week after birth.**
- Put your milk in the fridge as soon as possible after you express/pump.
- Put your expressed milk in the freezer if it will not be used within 48 hours.

Storage Times of Breastmilk:

Time breastmilk can be used within

	6 hours	72 hours	1 month	6 months	6-12 months
Room Temperature	✓	--	--	--	--
Fridge (0-4 C)	✓	✓* NICU	--	--	--
Freezer compartment in fridge	✓	✓	✓	--	--
Freezer with separate door as part of fridge	✓	✓	✓	✓	--
Deep freeze (-20 C)	✓	✓	✓	✓	✓

Storage areas for milk

cont'd...

* **For NICU:** Store the milk in the fridge if it will be used within 72 hours. If it will not be used, put it in the freezer within 48 hours. Previously frozen milk can be stored in the fridge for 24 hours.

Warming Chilled Milk:

- Keeping the cap of the container out of the water, warm chilled milk by holding under running warm water.
- Do not use a microwave to warm milk.
- It is not necessary to warm milk for babies who are born after 37 weeks, full term.

Thawing and Using Frozen Milk:

- Keep cap of the container out of the water.
- Defrost by holding container under running warm water, standing it in warm water or placing frozen milk in the fridge.
- Do not use a microwave to thaw milk.
- Shake gently to mix separated milk.
- Use thawed milk within 24 hours if refrigerated after defrosting.
- Throw out any milk that your baby does not eat within the first hour.
- **Do not refreeze milk.**

Cleaning Equipment when you are:

Using the pumps in the hospital

- Wipe down the pump with the disinfectant provided before and after using.
- A pump that does not appear clean should be sent for cleaning by the staff.
- While in hospital, the staff will give you a new pump kit every 24 hours.

Using a pump at home:

- Follow the manufacturers directions for cleaning pumps,
- When pumping for an ill or premature infant, pump parts should be disinfected once in 24 hours. See *Home Disinfection below.*

Pump Parts:

- Take equipment apart and take lids off bottles.
- Rinse in cold water to wash away traces of milk.
- Wash in hot soapy water and rinse well.
- Place on paper towel to air dry.

Home Disinfection (if required)

- Start with clean hands & clean equipment,
- Use one of the following methods:

Method 1: Boiling

- Place equipment in a pot with a lid.
- Cover equipment with tap water.
- Bring water to a boil.
- Boil for 5 minutes. Use the oven timer to prevent damage to the equipment.
- Remove equipment with tongs before pouring off water.
- Air dry on a clean paper towel.

Method 2

- Mix 250mL or 1 cup of household bleach with 2 L or 9 cups of tap water in a glass or plastic container large enough to cover equipment. Do not use a metal container.
- Soak clean equipment for 10 minutes.
- Rinse with boiled water.
- Air dry on paper towel.
- Use a new bleach and water solution each time.

Transporting Milk

Freshly expressed milk:

- After pumping, if possible, chill milk in the fridge,
- Keep chilled while carrying it to and from the hospital by using a thermal lunch kit with frozen gel packs.
- Keep milk in the fridge until you are ready to come to the hospital and then pack in the thermal lunch kit.

Frozen milk:

For short trips of about 1 to 3 hours:

- Pack frozen milk in a thermal lunch kit or a sturdy walled cooler with frozen gel packs.
- Remove extra air with crumpled newspaper or paper toweling.
- Bottles that are only partly filled need extra frozen gel packs, especially on a warm day.
- Bottles filled completely with frozen milk will stay frozen longer.

For longer trips or for shipping milk that takes between 4 and about 24 hours:

You will need:

- A cardboard box
- Coolers
- Frozen gel packs
- Newspaper crumpled or styrofoam peanuts/chips
- Packing tape
- Address label & pen (if shipping)

Use a sturdy sided reusable cooler or place a styrofoam cooler into a cardboard box and line the cooler with foam chips or crumpled newspaper. This helps to keep the milk frozen. Tightly pack the frozen milk into the smallest cooler you can. Add frozen gel packs and remove all air with styrofoam peanuts, towels or newspaper. Do not use regular ice.

Shipping Milk

If shipping by courier, seal the styrofoam cooler with packing tape. Milk will remain frozen about 18 to 24 hours when the bottles are close to full depending on the outside temperature. The amount of time the milk will stay frozen is shorter with warmer weather or partially filled bottles, or with a small number of bottles when packed this way. Address the box and place in freezer until as close to pick up time as possible.

If shipping will take over 24 hours dry ice is needed. Check with the shipper about how much dry ice you can use. Containers with dry ice should not be transported in a car as dry ice is a hazardous substance.

Shipping Companies

Call a shipping company and ask for a package pick up. A list of companies is given below. Ask for their pickup and arrival times. A late pick up for over night delivery is best.

Weather temperatures should be considered when packing milk for shipping. When milk is shipped, it must be shipped frozen overnight by courier or bus. The hospital is not able to cover the cost of shipping. The milk should be placed in a freezer as soon as it arrives. If you are shipping mother's milk to your baby in the BC Women's NICU, ask the shipping company to bring the milk to the NICU.

Couriers

Dan Foss 604-524-5959

Areas covered include Okanagan, Fraser Valley, Whistler/Squamish, Greater Vancouver, Vancouver Island and Kamloops.

Greyhound Couriers

Pick up and Delivery: 604-523-3600 or 604-681-3526
Cheapest if dropped off and picked up.

Other couriers include but are not limited to the following:

- FedEx Nationwide, 800-463-3339
- UPS Nationwide, 1-800-742-5877
- Purolator, 1-888-744-7123

More information can be found online.

Airline Travel with Human Milk

The rules about carrying milk through airport security checkpoints change. Check with the airline if you:

- wish to carry on board more milk than your baby would need to reach your destination.
- are flying without your baby but wish to carry greater than 3 ounces of milk.

Otherwise, let security know you are carrying human milk at the security checkpoint so they can inspect it. Separate the milk from any other liquids, gels, and aerosols in zip lock bags. Gel packs must be less than 100 mL. Be prepared to check your milk if the airline will not permit carry-on. More information can be found online at: <http://www.tsa.gov/travelers/airtravel/children/formula.shtm>

Got extra milk?

If you have 100 to 200 ounces or more of extra milk please consider donating it to the BC Women's Milk Bank. All donors must complete a screening process similar to screening for blood donation.

Please call 604-875-2282 for more information.

It's good to ask!

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