

Care Provider's Information

Human Milk Storage Guidelines

Storing milk in 2-4 ounce amounts helps reduce waste. Be sure all containers are labeled with the baby's name, date the milk was expressed, and date it was frozen (if frozen). Refrigerated milk has more anti-infective properties than frozen milk.

Human milk can be stored:

- at room temperature (60-85°F, 16-29°C) 3-4 hours optimal (6-8 hours acceptable under very clean conditions)
- in a refrigerator (32-39°F, 0-4°C) for 3 days optimal (5-8 days under very clean conditions)
- in a freezer compartment inside a refrigerator (variable temperature due to the door opening) for up to 2 weeks
- in a freezer compartment with a separate door (variable temperature due to the door opening) for up to 3 to 4 months.
- in a separate deep freeze (0°F, -19°C) for up to 6 months or longer.

Containers — Refrigerated or frozen milk may be stored in:

- BPA-free plastic or glass containers with well-fitting tops
- freezer milk bags that are designed for storing human milk
- disposable bottle liners are not recommended.

Warming:

- Thaw and/or heat under warm, running water.
- Do not bring temperature of milk to boiling point.
- Gently swirl milk before testing the temperature. Swirling will also redistribute the cream into the milk. (It is normal for stored milk to separate into a cream and milk layer.) Do not shake.
- Do not use a microwave oven to heat human milk.
- Discuss with the mother if she wants milk left in the bottle after a feeding saved and used for a later feeding.

Thawed (previously frozen) milk:

- If milk has been frozen and thawed, it can be kept in the refrigerator for up to 24 hours. It should not be refrozen. It is not known whether previously frozen milk that is left in the bottle after a feeding can be safely kept until the next feeding.

Research indicates that human milk has previously unrecognized properties that protect it from bacterial contamination. One study (1) found that there was no statistically significant difference between the bacterial levels of milk stored for 10 hours at room temperature and milk that had been refrigerated for 10 hours. Another study (2) found that after 8 days of refrigeration some of the milk actually had lower bacterial levels than it did on the day it was expressed.

Expressed milk can be kept in a common refrigerator at the workplace or in a day care center. The US Centers for Disease Control and the US Occupational Safety and Health Administration agree that human milk is not among the body fluids that require special handling or storage in a separate container.

- (1) Barger, J. and Bull, P. A comparison of the bacterial composition of breast milk stored at room temperature and stored in the refrigerator. *Intl J Childbirth Ed*, 1987: 2:29- 30.
- (2) Pardou, A. et al., Human milk banking: influence of storage processes and of bacterial contamination on some milk constituents. *Biol Neonate* 65:302 to 309, 1994.



VERMONT
DEPARTMENT
OF HEALTH

Breastfeeding
Friendly
Employer
108 Cherry St.
PO Box 70
Burlington, VT
05402

