Human Milk Guidelines for the Healthy, Term Infant/Child

Human milk storage
(Guidelines from The Academy of Breastfeeding Medicine)

<table>
<thead>
<tr>
<th>FRESHLY EXPRESSED MILK</th>
<th>TEMPERATURE</th>
<th>MAXIMUM STORAGE TIME</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room temperature</td>
<td>60-85°F (16-29°C)</td>
<td>4 hours (optimal)</td>
<td>Cover containers and keep as cool as possible. Chill or refrigerate as soon as you are able if you do not use milk during timeframe noted.</td>
</tr>
<tr>
<td>Insulated cooler bag with ice packs</td>
<td>59°F (15°C)</td>
<td>24 hours</td>
<td>Keep ice packs in contact with milk containers at all times. Limit opening cooler bag.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REFRIGERATED MILK</th>
<th>TEMPERATURE</th>
<th>STORAGE TIME</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigerator (fresh milk)</td>
<td>39.2°F (~4°C)</td>
<td>96 hours or 4 days (optimal)</td>
<td>Store milk in the back of the main body of the refrigerator.</td>
</tr>
<tr>
<td>Refrigerator (previously frozen, thawed milk)</td>
<td>39.2°F (~4°C)</td>
<td>24 hours</td>
<td>Store milk in the back of the main body of the refrigerator.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FROZEN MILK</th>
<th>TEMPERATURE</th>
<th>STORAGE TIME</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freezer</td>
<td>Less than 24.8°F (&lt;-4°C)</td>
<td>9 months</td>
<td>Store milk toward the back of the freezer, where temperature is most constant.</td>
</tr>
</tbody>
</table>

Storing Milk
- Containers can be glass, hard plastic or human milk storage bags. Avoid containers with bisphenol A (BPA)
- Store milk in 1-4 oz. portions for easier thawing and warming and to avoid waste
- Label all stored containers of milk with the date and time of milk expression. Add the child’s name to the label, if the milk will be used in a childcare setting
- You may combine milk from different pumping sessions into one container. When labeling, use the date of first milk expressed when adding new milk
- Avoid adding warm milk to a container of refrigerated or frozen milk. Cool the new milk before combining
- After a container is filled with milk, leave space at the top of the container to allow for expansion with freezing
- Place newest frozen milk in the back of the freezer

Transporting Milk
- Pack milk in an insulated cooler with ice or freezer gel packs
Thawing and Warming Milk
• Thaw frozen milk in the refrigerator. Thawing milk in the refrigerator takes about 12 hours
• If necessary, thaw rapidly by holding the container of frozen milk under warm running water, placing in a bowl of warm water (taking care not to completely submerge) or using a waterless warmer
• DO NOT heat milk in a microwave. Excessive heat destroys valuable nutritional properties and creates hot spots in the milk that could burn your child’s mouth
• Shake gently before feeding to remix the creamy portion that separates during storage

Using Stored Milk
• Fresh milk is better than frozen milk. Use the oldest milk in the refrigerator or freezer first
• Children may drink thawed milk at a variety of temperatures from cool to warm, depending on preference
• Use any milk that has been brought to room temperature within 2 hours
• Discard any milk that has come in contact with your child’s mouth within 1 hour
• Once milk is thawed (no ice crystals), do NOT refreeze

Pumping Tips
• Before every milk expression, wash your hands with soap and water. You may use a waterless hand cleanser if your hands do not appear dirty
• Find a relaxing position. Apply warm, moist packs to your breasts and/or massage for several minutes before pumping
• If your child is not feeding at breast or if you have milk supply concerns, strive to pump at least 8 times (10-12 times is better) in a 24-hour period for 15-30 minutes each, with at least one nighttime pumping between midnight and 6 a.m. Once your milk supply is established, you may be able to decrease pumping frequency. Talk to your lactation consultant or provider for guidance
• Double pumping (pumping both breasts at the same time) in combination with breast massage and hand expression yields higher volumes of milk and fat
• Pumping should not be painful. Adjust breast pump suction to the highest comfortable setting. Make sure you are using the right size breast shields when pumping. If you have questions or need help, talk to a lactation consultant or healthcare provider

Cleaning Pump Equipment
• Follow the manufacturer instructions for cleaning and sanitizing your pump
• After each use, you will usually need to wash any milk collection equipment that has come in contact with milk (does not include tubing). Use hot, soapy water, rinse well and air dry. Do not place pump parts directly into the sink. Use a separate, clean wash basin just for infant feeding items
• Sanitize milk collection equipment once daily by using a microwave steam bag specifically for breast pump parts, boiling in water for 15-20 minutes, or by using a dishwasher with a sanitize setting