

TITLE**EXPRESSED BREAST MILK: SAFE MANAGEMENT****DOCUMENT #**
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Patient Safety

If you have any questions or comments regarding the information in this procedure, please contact the Clinical Policy Department at clinicalpolicy@albertahealthservices.ca. The Clinical Policy website is the official source of current approved clinical policies, procedures and directives.

OBJECTIVES

- Consistent defined practices are essential to ensure quality, safe care for hospitalized infants.
- Administrative practices support that the intended expressed breast milk is fed to the intended infant.
- Expressed breast milk is safely collected, labelled, stored and administered.
- Safe management of expressed breast milk is necessary to ensure that the feeding of breast milk is encouraged.

APPLICABILITY

Compliance with this procedure is required by all Alberta Health Services employees, members of the medical and midwifery staffs, students, volunteers, and other persons acting on behalf of Alberta Health Services (including contracted service providers as necessary). This procedure does not limit any legal rights to which you may otherwise be entitled.

PROCEDURE

1. Collection

- 1.1 Perform **hand hygiene**. If there is a potential for contact with expressed breast milk, wear non-sterile gloves. Instruct mothers to perform hand hygiene before pumping or hand expression.
- 1.2 Equipment
 - a) Gather equipment and supplies, and provide mother with privacy for pumping (see Appendix A *Expressed Breast Milk Collection Equipment List*).
 - b) Breast shields, valves, membranes, and tubing are considered a single patient use item, and shall not be reprocessed for use by another patient. Visually inspect the individual components for cracks, chips, tears, discoloration or deterioration prior to use. Containers for expressed breast milk and lids must be sterile.
 - c) Assemble pump and pumping kit and instruct mother on the operation of the pump according to the manufacturer's instructions.
 - d) If the mother is hand expressing the breast milk, instruct and support the mother as required.
 - e) When pumping is complete, place sterile lids on sterile expressed breast milk containers.
 - f) Wipe the outside of the container with a food safe hospital grade disinfectant if contaminated with spilled milk.
- 1.3 Labelling
 - a) Confirm with the mother that the infant's hospital generated labels are accurate and place the labels on the container(s).
 - b) If the mother is pumping for multiple infants identify the expressed breast milk with each infant's label.
 - c) At a minimum the labels must contain the infant's first and last name, birth date and his/her hospital identification number.
 - d) Write the date and time of the expression or pumping, thawing, or removal of the expressed breast milk from the refrigerator on the infant label(s) on the container.

2. Cleaning the Equipment

- 2.1 Between uses, place the pieces of the pumping kit (shield, membranes and valves) that come in contact with expressed breast milk in a clean dish or container. Rinse with cool water to remove the residue of milk, wash with warm soapy water (use liquid dish detergent), rinse thoroughly and drip dry on a clean paper towel. Store the equipment in a clean container or bag that is correctly labelled with the mother's name and appropriate identification until the next use.
- 2.2 At some sites each mother is provided with an individual breast pumping kit. The pumping kit is to be cleaned between each use and must not be reprocessed for use by another mother.
 - a) Replace expressed breast milk syringes every four hours (4 hrs).
 - b) Replace expressed breast milk tubing every four hours (4 hrs).
- 2.3 Clean storage bins with hot water and liquid detergent and wipe off breast milk spills with food safe, hospital grade disinfectant wipes prior to use by another mother.

3. Storage

- 3.1 Check the label on the expressed breast milk to ensure it contains accurate, legible, and complete information.
- 3.2 Discard any unlabelled, mislabelled or expired expressed breast milk.
- 3.3 See Appendix B *Storage Requirements and Usage of Breast Milk in Hospital* for specific details.
- 3.4 Freshly expressed breast milk, left at room temperature should be used within four (4) hours or discarded.
- 3.5 If not feeding freshly expressed breast milk in the next four (4) hours, refrigerate or freeze immediately. Place expressed breast milk in the designated refrigerator or freezer in the labelled storage bin. If freezing the milk, fill the container $\frac{3}{4}$ full.

NOTE: designated refrigerators are to be secured; therefore a **health care professional** with access to the refrigerator will need to store and retrieve the expressed breast milk.

- 3.6 Use designated refrigerators and freezers exclusively for storage of expressed breast milk.
- 3.7 Place the expressed breast milk container in the refrigerator or freezer in a storage bin with the infant labels on each bin.

- 3.8 Do not store the expressed breast milk in the door of the refrigerator or freezer as the temperature is more stable in the interior.
- 3.9 Secure fridge, freezer and/or room after the expressed breast milk is stored.
- 3.10 Follow unit processes for daily documentation of refrigerator and freezer temperature. Report any discrepancies immediately.

4. Retrieval, Verification, and Feeding

- 4.1 In preparation for feeding, or at the request of the **parent/guardian**, retrieve expressed breast milk from the storage bin in the refrigerator or freezer. Check the expressed breast milk labels for the correct name, birth date, hospital number and expiry date.
- 4.2 Take the container of expressed breast milk to the **patient** if required. With another health care professional, or with the parent/guardian, verify that the name and hospital identification number on the container of expressed breast milk matches exactly with the information on the infant's hospital identification band.

Note: The signature of a parent/guardian does not confirm that the expressed breast milk in the container is the expressed breast milk of the infant's mother; rather it acknowledges that the patient identification on the expressed breast milk container matches the patient identification on the infant's identification band.
- 4.3 The appropriate amount of expressed breast milk for each infant feeding is determined by the infant's **most responsible health practitioner's** orders regarding infant's feeding tolerance and growth needs over a period of time.
- 4.4 Do not warm expressed breast milk in a microwave or in a warm water bath that contains another mother's expressed breast milk.
- 4.5 Frozen expressed breast milk can be slowly thawed at room temperature and must be re-refrigerated before it is completely thawed, while ice crystals are still present.
- 4.6 Frozen expressed breast milk may be gradually thawed in the refrigerator or warmed using one of the following methods:
 - a) use a device designed to warm expressed breast milk;
 - b) place the labelled expressed breast milk container in a protective cover (e.g. plastic bag, procedure glove) and place in a warm water bath. Discard the protective cover after single use; or
 - c) place the labelled syringe filled with expressed breast milk in the incubator with the infant to warm the milk.
- 4.7 Add additional information regarding the date and time of thawing to the existing label or on a separate label on the bottle.

- 4.8 Warm the milk to body temperature for premature infants at risk for necrotizing enterocolitis (NEC). For term or older infants, feeds can be served at room temperature, body temperature or straight from the refrigerator.
- 4.9 Use only pumps and supplies designated for enteral administration. Do not use parenteral syringes to prepare, measure or administer liquids intended for the oral or enteral route.
- 4.10 If feeding expressed breast milk via a feeding tube or syringe pump, label the bag/syringe with patient name, identification number and contents. Trace the tubing from the expressed breast milk to the point of entry into the infant to ensure appropriate route.
- 4.11 When an infant has been feeding from a bottle and the expressed breast milk is not used in its entirety, discard the container of remaining breast milk at the end of the feeding.
- 4.12 Document feeding in the **health record**, including the signature of the second health care professional or parent/guardian who verified that the intended milk was used.

5. Addition of Breast Milk Fortifiers/Additives

- 5.1 If any fortifiers, additives, or medications are added to expressed breast milk, an **independent double check** of the additions is required in accordance with medication administration policy.
- 5.2 If multiple bottles of breast milk are combined in preparation for the addition of fortifiers and/or medications each bottle should be independently double checked to ensure the milk is for the same infant. A new identification label is then placed on the bottle holding the combined contents including the additives/medications, and the initials of the health care professional are documented on the label.
- 5.3 Clean preparation area with a food safe, hospital grade disinfectant. Perform hand hygiene.
- 5.4 Verify the correct additives in the expressed breast milk by using the infant health record and the most responsible health practitioner's orders.
- 5.5 Add fortifiers to expressed breast milk at room temperature. Handle fortifier, additive powder and/or medications with aseptic technique.
- 5.6 When adding fortifiers or any other additives to expressed breast milk for infants of multiple gestations there must be separate containers for each individual infant; appropriately labelled with the correct infant's name, birth date, hospital number and expiry date placed on the container.

- 5.7 If at any time the expressed breast milk is transferred from the original container to a new container, the identification of the expressed breast milk should be verified by two individuals; a health care professional and one of the following: a second health care professional or the infant's parent/ guardian. Their initials are documented on the label.
- 5.8 Once the fortifier/additive/medication is added to the expressed breast milk, shake the bottle to ensure it is well mixed.
- 5.9 In addition to the expressed breast milk label with the patient name, birth date and hospital identification number; add a label with the following information:
- a) type of fortifier/additive or medication and amount and
 - b) date and time prepared.
- 5.10 Expressed breast milk with additives/fortifiers/medications is stored using the same process as other expressed breast milk; however expressed breast milk with additives/fortifiers/medications must be used within 24 hours.

6. Parent/Guardian Education

- 6.1 The education of parents/guardians regarding safe management of expressed breast milk should, whenever possible, occur upon admission and orientation to the care unit and be reinforced throughout the hospital stay. Health care professionals will engage the parent(s)/guardian in initial verbal education and will ensure ongoing opportunities for conversation, augmenting verbal information with printed materials as available.
- 6.2 Provide parent/guardian with verbal and written information regarding expressed breast milk including:
- a) the importance of providing expressed breast milk whenever possible for the infant's health;
 - b) how to collect, store, retrieve, and feed expressed breast milk while their infant is in the hospital; and
 - c) the importance of verifying the accuracy of expressed breast milk being fed to their infant, including potential risk for viral transmission.
- 6.3 Encourage questions and engage parents and families. Ask parent to explain what they need to do in their own words and practices to ascertain understanding and need for reinforcement/further teaching.

NOTE: Attention should be paid to the cultural, language and literacy differences and challenges with available documents.

7. Documentation

- 7.1 Health care professionals shall document the following information on the patient's health record:
- a) verification of match between expressed breast milk container and infant identification band including signatures of two health care professionals or one health care professional and parent/guardian involved in bedside verification;
 - b) the addition of additives/fortifiers including double signatures of the health care professionals that performed the independent double check of the additives/fortifiers;
 - c) all parent/guardian education including reading materials provided and related follow-up if required; and
 - d) any adverse events related to expressed breast milk management and practices.

8. Adverse Events

- 8.1 Refer to the *Expressed Breast Milk: When Milk is Given to an Unintended Infant Procedure* to address adverse events that may occur related to expressed breast milk.

DEFINITIONS

Guardian means where applicable

For a minor:

- a) as defined in the *Family Law Act*;
- b) as per agreement or appointment authorized by legislation (obtain copy of the agreement and verify it qualifies under legislation; e.g., agreement between the Director of Child and Parent Services Authority and foster parent(s) under the *Child, Youth and Parent Enhancement Act*, or agreement between parents under the *Family Law Act*; or as set out in the *Child, Youth and Family Enhancement Act* regarding Guardians of the child to be adopted once the designated form is signed);
- c) as appointed under a will (obtain a copy of the will; also obtain grant of probate, if possible);
- d) as appointed in accordance with a personal directive (obtain copy of personal directive);
- e) as appointed by court order (obtain copy of court order) (e.g., order according to the *Child, Youth and Family Enhancement Act*.); and,
- f) a divorced parent who has custody of the minor.

Hand hygiene means a general term referring to practices which remove micro-organisms with or without soil from the hands (refers to the application of alcohol-based hand rub or the use of plain/antimicrobial soap and water hand washing).

Health care professional means an individual who is a member of a regulated health discipline, as defined by the *Health Disciplines Act* or the *Health Professions Act*, and who practises within scope or role.

Health record means the Alberta Health Services legal record of the patient's diagnostic, treatment and care information.

Independent double check means a verification process whereby a second health care professional conducts a verification of another health care professional's completed task. The most critical aspect is to maximize the independence of the double-check by ensuring that the first health care professional does not communicate what he or she expects the second health care professional to see, which would create bias and reduce the visibility of an error.

Most responsible health practitioner means the health practitioner who has responsibility and accountability for the specific treatment/procedure(s) provided to a patient and who is authorized by Alberta Health Services to perform the duties required to fulfill the delivery of such a treatment/procedure(s) within the scope of his/her practice.

Parent means the adult guardian of a child in accordance with the Alberta Family Law Act (see Appendix C – *Overview of the Definition of "Guardian" as set out in Section 20 of The Family Law Act*).

Patient means all persons who receive or have requested health care or services from Alberta Health Services and its health care providers and also means, where applicable:

- a) a co-decision-maker with the person; or
- b) an alternate decision-maker on behalf of the person.

REFERENCES

- Alberta Health Services, *Consent to Treatment/Procedure(s) Minors/Mature Minors* PRR-01-03
- Alberta Health Services, *Disclosure of Harm Policy* (2011): PS-01.
- Alberta Health Services, *Disclosure of Harm Procedure* (2011): PS-01-01.
- Alberta Health Services *Expressed Breast Milk: Safe Management Policy*
- Alberta Health Services *Expressed Breast Milk: When Milk is Given to the Wrong Infant Procedure*
- Alberta Health Services, *Hand Hygiene Policy: PS-02.*
- Alberta Health Services, *Hand Hygiene Policy: PS-02 – 01.*

REVISIONS

N/A

APPENDIX A

Expressed Breast Milk Collection Equipment List

- Plastic basin if required for cleaning and storing expressed breast milk kits
- Breast pump
- Clean pumping kit (single or double as required)
- Sterile breast milk containers and lids
- Non-sterile gloves
- Pre-printed labels with infant's name, birth date and hospital identification number
- Indelible marker
- Germicidal wipes
- Fortifiers/additives/medications as required
- Labelled trays for fridge and/or freezer
- Dedicated microwave

Appendix B

Storage Requirements and Usage of Breast Milk in Hospital

Type	Location	Storage Temperature	Duration of Storage
Fresh expressed breast milk	Room Temperature	15°C-20°C	Discard after 4 hours (time from pumping and removal from refrigerator).
Fresh expressed breast milk	Refrigerator	0°C-4°C	Discard after 48 hours.
Expressed breast milk with additives	Room Temperature	15°C-20°C	Discard after 4 hours (time from pumping and removal from refrigerator).
Expressed breast milk with additives	Refrigerator	0°C-4°C	Discard after 24 hours.
Thawed expressed breast milk	Refrigerator	0°C-4°C	Discard after 24 hours.
Frozen expressed breast milk	Freezer within a refrigerator (one door)	Less than 0°C	Discard after two weeks.
Frozen expressed breast milk	Freezer attached to refrigerator top, bottom or side (two door)	Less than 0°C	Discard after 3-4 months.
Frozen expressed breast milk	Deep freezer	-18°C to -20°C	Expressed breast milk may be stored in the freezer for up to 12 months.

APPENDIX C

Overview of the Definition of “Guardian” as Set Out in Section 20 of the Family Law Act

A guardian is a parent if:

1. The parent has acknowledged that he or she is the parent of the child; AND
2. Has demonstrated an intention (*see guidelines below*) to assume the responsibility of a guardian in respect of the child within one year of either becoming aware of the pregnancy or becoming aware of the birth.

Parentage (who is a parent):

There are three combinations of parent-child relationships recognized under the *Family Law Act*:

Children conceived without assisted reproduction:	Children conceived with assisted reproduction and whose birth mother is the intended parent:	Children who were conceived with assisted reproduction and whose birth mother is a surrogate:
<p>Birth mother and biological father are the parents, except in the case of adoption where one would refer to the adoption Court Order. If adoption is in progress, contact Clinical Legal Services.</p> <p><i>*see below for who is presumed to be the biological father.</i></p>	<p>The birth mother will be considered to be one parent.</p>	<p>Until there is a Court Order declaring parentage, the surrogate remains the only legal parent.</p>
	<p>The other parent will depend on how the embryo was created:</p> <ol style="list-style-type: none"> 1. If the embryo was created from the intended male parent's sperm, then the other legal parent is the intended male parent. 2. If the embryo was created from donated sperm, then the person who was married to or in a conjugal 	<p>Once the surrogate has relinquished her parental rights, a Court Order will declare the proper legal parents.</p>

	relationship with the birth mother AND consented to be a parent at the time of conception is the other parent.	
If there is a dispute over parentage, a court order may be sought to declare that someone is or is not a parent of a particular child. For Adoptions, a Court Order will be provided.		

INTENTION

May be shown by any of the following:

1. Being married to the other parent at the time of the birth of the child;
2. Being married to the other parent after the birth of the child;
3. Being married to the other parent that, within 300 days before the birth of the child ended by death, decree of nullity or judgment of divorce;
4. Being an adult Interdependent partner of the other parent at the time of birth of the child;
5. Being an adult Interdependent partner with the other parent after the birth of the child;
6. Having cohabitated with the other parent for at least 12 consecutive months during which time the child was born;
7. Having entered into an agreement with the other parent to be a guardian under the *Family Law Act*;
8. Having carried the pregnancy to term (for the birth mother);
9. Where the other parent is the birth mother, voluntarily providing or offering to provide support for the birth mother during or after her pregnancy, not by court order;
10. Voluntarily providing or offering to provide reasonable direct or indirect financial support for the child;
11. Court Order (Court may find other evidence to be that of Intention);
12. Where the child is born as a result of assisted reproduction, being a parent of the child under section 8.1 (see middle column under Parentage above).

BIOLOGICAL FATHER

The following will be presumed to be the biological father where the child was born without assisted reproduction (see first column under Parentage above):

The male person who:

1. Was married to the birth mother at the time of the child's birth;

2. Was married to the birth mother by a marriage that within 300 days before the birth of the child ended by: death; decree of nullity; or judgment of divorce;
3. Married to the birth mother after the child's birth and has acknowledged that he is the father;
4. Cohabitated with the birth mother for at least 12 consecutive months during which time the child was born and he has acknowledged that he is the father;
5. Cohabitated with the birth mother for at least 12 consecutive months and the period of cohabitation ended less than 300 days before the birth of the child;
6. Is registered as the parent of the child at the joint request of himself and the birth mother under the *Vital Statistics Act*, or under similar legislation in a province or territory other than Alberta;
7. Has been found by a court of competent jurisdiction in Canada to be the father of the child for any purpose.

Note: Two people *cannot* be presumed to be the biological father. If that is the case, then no one will be presumed to be the biological father.