

Local Guideline



John Hunter
Children's Hospital
CHILDREN, YOUNG PEOPLE AND FAMILIES



Health
Hunter New England
Local Health District

Immune Supportive Oral Care (ISOC) for Neonates in NICU/SCN

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| Sites where Local Guideline applies | Neonatal Intensive care Unit and Special care Nursery, JHCH where neonates receives care. |
| This Local Guideline applies to: | |
| 1. Adults | No |
| 2. Children up to 16 years | No |
| 3. Neonates – less than 29 days | Yes |
| Target audience | Clinical staff, who provide care to neonates in NICU, JHCH |
| Description | This guideline provides information to staff to support practice of immune supportive oral care. |

[Hyperlink to Guideline](#)

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| Keywords | Breast milk, Colostrum, Immune Supportive Oral Care (ISOC), Immunity, Nil By Mouth (NBM), JHCH, NICU |
| Document registration number | JHCH_NICU_03.08 |
| Replaces existing document? | Yes |
| Registration number and dates of superseded documents | Unchanged |
| Related Legislation, Australian Standard, NSW Ministry of Health Policy Directive or Guideline, National Safety and Quality Health Service Standard (NSQHSS) and/or other, HNE Health Document, Professional Guideline, Code of Practice or Ethics: | <ul style="list-style-type: none"> NSW Health Policy Directive 2014_036 Clinical Procedure Safety http://www0.health.nsw.gov.au/policies/pd/2014/pdf/PD2014_036.pdf NSW Health Policy PD 2005_406 Consent to Medical Treatment http://www.health.nsw.gov.au/policies/PD/2005/pdf/PD2005_406.pdf NSW Health Policy Directive PD 2007_036 Infection Control Policy http://www.health.nsw.gov.au/policies/pd/2007/pdf/PD2007_036.pdf HNELHD: JHCH_NICU_09.03 Expressed Breast Milk-Freezing, Storage and Checking of JHCH_NICU. http://www.kaleidoscope.org.au/site/content.cfm?page_id=351319&current_category_code=8338&leca=930 NSW Health PD2010_19 Breast Milk: Safe Management http://www0.health.nsw.gov.au/policies/pd/2010/pdf/PD2010_019.pdf NSW Health PD2011_042 Breastfeeding in NSW: Promotion, Protection and Support http://www0.health.nsw.gov.au/policies/pd/2011/pdf/PD2011_042.pdf |
| Prerequisites (if required) | N/A |
| Local Guideline note | This document reflects what is currently regarded as safe and appropriate practice. The guideline section does not replace the need for the application of clinical judgment in respect to each individual patient but the procedure/s requires mandatory compliance . If staff believe that the procedure/s should not apply in a particular clinical situation they must seek advice from their unit manager/delegate and document the variance in the patients' health record. |
| Position responsible for the Local Guideline and authorised by | Pat Marks. General Manager / Director of Nursing CYPFS |

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| Contact person | Jennifer Ormsby NICU Guideline Coordinator NICU JHCH |
| Contact details | Jennifer.Ormsby@hnehealth.nsw.gov.au Phone 02 4985 5304 |
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| This document contains advice on therapeutics | No |
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RISK STATEMENT

This local guideline has been developed to provide guidance to clinical staff in NICU to assist in providing immune supportive oral care (ISOC) to the newborn until sucking feeds commence. It ensures that the risks of harm to the infants whilst providing ISOC are identified and managed.

Any unplanned event resulting in, or with the potential for injury, damage or other loss to infants/staff/family as a result of this management must be reported through the Incident Information management System and managed in accordance with the Ministry of Health Policy Directive: Incident managaemtnPD2007_061. This would include unintended injury that results in disability, death or prolonged hospital stay.

Risk Category: Clinical Care & Patient Safety

OUTCOMES

| | |
|----------|---|
| 1 | All infants are provided with ISOC until sucking feeds commence unless breast milk is contra-indicated |
| 2 | The information on the benefits to their infant of ISOC for protective factors are explained to the parents |

GLOSSARY

| Acronym or Term | Definition |
|------------------------------------|--|
| Immune Supportive Oral care (ISOC) | Colostrum/breast milk (fresh never frozen) will coat the inside of the cheeks bilaterally with the clean cotton bud provided for oral care, and absorbed into the mucous membranes |
| Colostrum | The early milk produced in the first few days after birth, when the tight junctions in the mammary epithelium are open. Colostrum contains large amounts of antibodies to protect the newborn against disease, as well as being lower in fat and in higher in protein than mature breast milk. |
| Breast Milk/EBM | Breast milk expressed by the infants own mother (pasteurized human donor milk is not be used for ISOC |
| Preterm Infant/ Term Infant | An infant of gestational age (GA) less than 37 weeks/ An infant of gestational age equal to or greater than 37 weeks |

Immune Supportive Oral Care (ISOC) for Neonates in NICU/SCN One Page Summary and Checklist

(Ctrl+Click on [Coloured words to jump to that section](#))

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GUIDELINE

This Guideline does not replace the need for the application of clinical judgment in respect to each individual patient.

AIM

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All babies who are admitted to the NICU/ Special Care Nursery at JHCH, and are unable to feed by mouth will receive immune supportive oral care (ISOC) as early as possible. This facilitates the benefits of immune properties of breast milk even when 'nil by mouth', as well as providing developmentally sensitive oral care.

RATIONALE

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- Breast milk contains defence factors that include antimicrobial agents, anti-inflammatory factors, immunomodulators and leukocytes. These protective immune factors coat the gastrointestinal and upper respiratory tracts to promote colonisation with the mother's bacteria and help to prevent invasion of mucous membranes by respiratory and enteric pathogens.
- Pleasurable oral stimulation to help reduce adverse oral behaviours
- Promotes family centred care by allowing parents the opportunity for involvement in their infants care

INDICATIONS & CONTRAINDICATIONS

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- ***Every infant (preterm or term) who is not feeding by mouth will receive ISOC unless breast milk is contraindicated***
- NBM is **not** a contraindication

- Contraindications for ISOC are the same as contraindications for breast milk feeding, and include:

1. An infant whose mother

- Is infected with human immunodeficiency virus (HIV)
- Is taking antiretroviral medications
- Has untreated active tuberculosis
- Is infected with human T-cell lymphotropic virus type I or II
- Is using or dependent on an illicit drug except if breast milk is medically indicated.
- Is taking prescribed cancer chemotherapy agents contraindicated for breastfeeding.
- Is receiving any medications contraindicated in breastfeeding
- Is receiving diagnostic or therapeutic radioactive isotopes or exposure to radioactive materials (for as long as they are radioactive in the milk)

2. An infant diagnosed with galactosaemia, a rare genetic metabolic disorder.

INFORMATION FOR PARENTS

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Parents will be educated about the benefits of colostrum/breast milk. If possible this will be done before delivery, otherwise as soon as possible after delivery. All members of the interdisciplinary team will be responsible for parent education. Mothers will be encouraged to start hand expression/pumping within 5 hours of delivery or as soon as possible and to save colostrum in NICU approved container for ISOC. They will be offered an admission ISOC pack containing

- 6 x small plastic containers with lids
- 6 pink dots
- 3 packets sterile swabs

Mothers will be able to use sterile syringes for colostrum collection for first few days and then sterilise the containers provided in the ISOC pack for breast milk.

BREAST MILK FOR ISOC

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- ISOC is best administered using fresh breast milk. The immune-protective properties in frozen colostrum or breast milk are altered when milk is frozen however if only frozen milk available it may be used. No additives will be added to milk intended for ISOC
- ISOC will be initiated as soon as a drop of colostrum/breast milk is available. If there is <1 ml of available colostrum/breast milk this can be allocated to ISOC, however when it reaches this volume or above it requires prioritisation to enteral feeding.
- Fresh, never frozen colostrum may be stored in the refrigerator for up to 48 hours.

- ISOC will be administered directly from a cotton tipped swab stick (to use one sterile pack per shift, then discard-contains 5 swabs). The amount of breast milk required to saturate a cotton swab is 0.2mls.
- ISOC procedure will be performed at care times 3, 4 or 6th hourly.
- ISOC will be recorded on the infant flow chart in the oral feed section. Document ISOC attended in the relevant timed square with 2x RN signatures and NBM if no other gastric feeds are being given.
See image on following page for details on documentation.
- ISOC will continue until the baby has its first sucking feed (established breastfeed where the milk coats the buccal mucosa).
- If baby requires oral Nilstat administration it may be given at the conclusion of 'cares' with/without enteral feed and the ISOC given at the commencement of 'cares'

PROCEDURE

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- Mothers provide their own fresh colostrum/expressed breast milk. Mothers will be provided with labels identifying the mothers name and baby's MRN with time and date of expression recorded.
- Hand hygiene will be performed before and after collection or handling of breast milk and wearing PPE as per unit policy
- ISOC will be double checked and signed by another registered nurse as per checking procedure for breast milk in CPG "[Expressed Breast Milk-Freezing, Storage and Checking of JHCH NICU 09.03](#)".
- Colostrum or EBM is decanted into smaller containers, a small amount (3-5mls) of fresh breast milk to use for oral care within 48hours of pumping and label with pink circle to identify for use as ISOC.
- Dip a new sterile swab into fresh colostrum or mature milk. Ensure the swab absorbs all drops of colostrum/breast milk or is saturated (0.2mls will achieve this) when there is ample supply.
- Ideally ensure the infant is arousing or in the awake state. Apply the milk in a developmentally sensitive manner. Coat the entire buccal mucosa bilaterally. Discard used swab after use.
- If the mother has ceased expressing, then frozen milk is decanted by the nurse into the ISOC container for use.
- Record on infant flow chart as shown below by writing ISOC and signing with 2 signatures- person administering and person checking. If infant is also on breast milk feeds, 2 signatures are also required for the breast milk feed-may or may not be the same breast milk i.e. 4 signatures required when feed and ISOC given so draw a diagonal line across square
- Continue ISOC until the first sucking feed (established breastfeed where the milk coats the buccal mucosa).

Documentation on the NICU Care Flowchart

How to record ISOC when infant on feeds

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|------------|---------------------------|---------------------------------|-------------|---------------------------------|
| Oral Feeds | Signatures including ISOC | ISOC [Signature] | [Signature] | ISOC [Signature] |
| | Oral Feeds | 2 2 | 2 4 | 2 6 |

How to record ISOC when infant NBM

| | | | | |
|------------|---------------------------------|---------------------------------|--|---------------------------------|
| Oral Feeds | Signatures / ISOC *16 copies | ISOC [Signature] | | ISOC [Signature] |
| | Oral Feeds | NBM | | |

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AUTHORS

Shonnett Porter Lactation Consultant NICU JHCH
Deborah Ireland Lactation Consultant NICU JHCH

REVIEWERS

Sinead Redman NUM2 NICU JHCH
Jo Kent Biggs NE NICU JHCH
Vivienne Whitehead CNE NICU JHCH
Paul Craven Neonatologist NICU JHCH
Lynne Cruden Data Manager NICU JHCH
Prudence Ormerod CNS NICU JHCH
Jenny Ormsby CNE NICU JHCH

RATIFIED BY

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Any feedback on this document should be sent to the Contact Officer listed on the front page.