

**MEDICAL DIRECTIVE****Title:** Sucrose 24% Oral Solution for Pain Management in NICU Neonates**Approved by/Date:** **Medical Advisory Committee – Sept 16, 2008****Authorizing physician(s)**

Paediatrician/Neonatologist Physician Group.

**Authorized to who**

Registered Nurses employed in the Neonatal Intensive Care Unit (NICU).

**Patient Description / Population**

Infants admitted to the NICU.

**Medical Directive Description/Physician's Order**

1. Sucrose oral solution 24% may be administered prior to a **mild** to **moderately** painful procedure or a Premature Infant Pain Profile (PIPP) pain score of 6-12. Painful procedures appropriate for management with sucrose may include; tape removal, capillary blood sampling, venous blood sampling, IV insertions, IM injections, lumbar puncture, urinary catheterization, and immunization.
2. Sucrose administration for management of pain is **not appropriate** for severely painful procedures such as chest tube placement or intubation.
3. Premature Infant Pain Profile (PIPP) Score is assessed and documented prior to administration, and assessed post-administration for effectiveness. Refer to Policy & Procedure—NICU: Assessment of Pain in the Neonate: Premature Infant Pain Profile (PIPP).
4. The RN may administer the sucrose oral solution 24% to neonates according to the following gestational age:  
**30-32 weeks: 0.5mL po**  
**33-37 weeks: 1.0mL po**  
**greater than 37 weeks: 2.0mL po**  
**Maximum daily dose: 4 times in 24 hours**
5. The dose of sucrose oral solution 24% will be administered two (2) minutes prior to the painful procedure for maximum effect.
6. Dose may be administered in 2 minute intervals for prolonged procedures; divided or repeated to the maximum daily dose.
7. The route of administration can be a dipped pacifier or administered via syringe onto the tongue. When giving sucrose oral solution 24% via syringe, the dose should be delivered to the anterior portion of the tongue, where the taste receptors for "sweet" are located.
8. Additional developmental, behavioral, and environmental interventions will be used during the painful procedure in collaboration with the sucrose.

**Specific conditions/circumstances that must be met before the Directive can be implemented**

The nurse is responsible for informing parent(s) of the indications for sucrose oral solution 24% administration (i.e. for the use of a pacifier to aid in sucrose administration during invasive procedure). If consent to use a pacifier is not obtained, an oral syringe containing the calculated amount of sucrose solution may be substituted.

**Contraindications to the implementation of the Directive**

- Sucrose oral solution 24% **may not** be given by naso-gastric tube.
- Neonates presenting with the following conditions/risk factors:
  - i) neonates who are NPO (nothing by mouth)
  - ii) history of asphyxia
  - iii) risk of necrotizing enterocolitis (NEC)
  - iv) neonates receiving insulin infusions
  - v) critically ill neonates
  - vi) sedated neonates
  - vii) neonates with hypoglycemia

**Identify relevant Delegated Control Act or Added Skill associated with this Directive**

None

**Documentation requirements**

The nurse will document on the physician's order sheet "Administration of sucrose oral solution 24% as per Medical Directive." Documentation will be completed on the Medication Administration Record (MAR) – including dose, route and time of administration.

**Review/Evaluation Process**

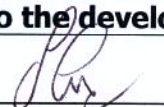


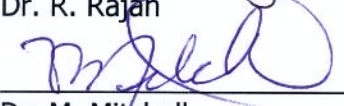
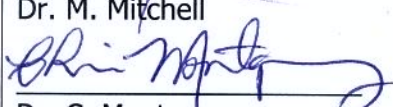
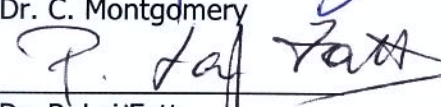

Every two years by Maternal Child Program

**Related Documents**

NICU: Assessment of Pain in the Neonate: Premature Infant Pain Profile (PIPP) Policy & Procedure.

**References**

- American Academy to Paediatrics, (2006). *Policy Statement—Prevention and Management of Pain in the Neonate*.
- Child Health Network, (2000). *Pain Management Standards*.
- Cochrane Database of Systematic Reviews, (2004). *Sucrose for analgesia in newborn infants undergoing painful procedures*.
- Gibbins, S., Stevens, B., Hodnett, E., Pinelli, J., Ohlsson, A., & Darlington, G. (2002). Efficacy and safety of sucrose for procedural pain relief in preterm and term neonates. *Nursing Research*. 51 (6), 375-381.
- Hospital for Sick Children, (2007—2008). *The Hospital for Sick Children Drug Handbook and Formulary*.
- Humber River Regional Hospital, (2003). *Women's & Children's Health Medical Directive Sucrose for Pain Management in Neonates*.
- National Association of Neonatal Nurses, (2001). *Pain Assessment and Management: Guideline for Practice*.
- Sunnybrook & Women's College Hospital, (2003). *Sunnybrook & Women's College Patient Care Manual: Sucrose Administration*.

<b>Developed by:</b>	Elaine Boeck Name	Former CEL Position/Title	Maternal Child Program Program
<b>Contact:</b>	Shannon Cross/Caroline Van Dyk Name	CEL Position/Title	Maternal Child Program Program
<b>(Main Contact – related to the development of the directive)</b>			
<b>Authorized by:</b>	 _____ Dr. S. Godfrey Chief of Paediatric's	<u>Nov 7/08</u> Date	
	 _____ Dr. M. Almadani Director of NICU	<u>Nov 4, 2008</u> Date	
	 _____ Dr. R. Rajah	<u>4 NOV 2008</u> Date	
	 _____ Dr. M. Mitchell	<u>Nov 4/08</u> Date	
	 _____ Dr. C. Montgomery	<u>Nov 04/08</u> Date	
	 _____ Dr. P. Lai/Fatt	<u>4/11/08</u> Date	
	 _____ Dr. K. Gunawardena	<u>NOV. 04<sup>th</sup>/08</u> Date	

**Approvals and Signatures:**

<b>Department Chief:</b>	Dr. S. Godfrey	Signature	Date
<b>Medical Director:</b>	Dr. M. Beatty	Signature	Date
<b>Program Director:</b>	Donna Brownlee, RN	Signature	Date
<b>Chair of NAC:</b>	Lorraine Sunstrum-Mann, RN	Signature	Date
<b>Chair of PPC:</b>	Thom Chambers, RN	Signature	Date
<b>Final Approval Chair of MAC:</b>	Dr. Treavor	Signature	Date