

## Management of Newborns Delivered to Drug Dependent Mothers

### Guideline Responsibilities and Authorisation

<b>Department Responsible for Guideline</b>	Newborn Intensive Care
<b>Document Facilitator Name</b>	Maggie Rainbow
<b>Document Facilitator Title</b>	Nurse Practitioner- Neonates
<b>Document Owner Name</b>	Jutta van den Boom
<b>Document Owner Title</b>	Clinical Director newborn Service
<b>Target Audience</b>	SMO, registrar, NP, registered midwives, registered nurses
<p><b>Disclaimer:</b> This document has been developed by Waikato District Health Board specifically for its own use. Use of this document and any reliance on the information contained therein by any third party is at their own risk and Waikato District Health Board assumes no responsibility whatsoever.</p>	

### Guideline Review History

Version	Updated by	Date Updated	Summary of Changes
1	M. Rainbow	Jan 2022	New guideline

## Management of Newborns Delivered to Drug Dependent Mothers

### Contents

1	Overview .....	3
1.1	Purpose .....	3
1.2	Scope .....	3
1.3	Patient / client group.....	3
1.4	Definitions and acronyms .....	3
2	Clinical management.....	4
2.1	Roles and responsibilities.....	4
2.2	Competency required .....	4
2.3	Equipment.....	4
2.4	Guideline.....	4
2.5	Potential complications .....	6
2.6	After care.....	6
3	Patient information.....	6
4	Evidence base .....	6
4.1	Summary of Evidence, Review and Recommendations.....	6
4.2	Bibliography.....	7
4.3	Associated Waikato DHB Documents.....	7
	Appendix A – flowchart for Management of Neonatal Abstinence Syndrome.....	8

## Management of Newborns Delivered to Drug Dependent Mothers

### 1 Overview

#### 1.1 Purpose

This guideline is for the use in assessment of the newborn delivered to mothers taking opioid medications. It also provides guidance for assessment and management of infants delivered to mothers on other addictive drugs including methamphetamine, benzodiazepines and some psychotic medications.

SSRI medications e.g. fluoxetine and sertraline can also elicit withdrawal in the newborn infant.

#### 1.2 Scope

Staff working in Waikato Newborn Intensive care, postnatal ward at Waikato hospital.

#### 1.3 Patient / client group

Newborn infants delivered to mother with known intake of addictive drugs likely to induce drug withdrawal. Infants who are presenting with signs associated with drug withdrawal and uncertain or suspected maternal drug use.

#### 1.4 Definitions and acronyms

<b>HIE</b>	Neonatal Hypoxic Ischemic Encephalopathy
<b>HIV</b>	Human Immunodeficiency Virus
<b>NAI</b>	Non-accidental injury
<b>NAS</b>	Neonatal Abstinence Syndrome
<b>NICU</b>	Newborn Intensive Care
<b>NOWS</b>	Neonatal Opioid Withdrawal Syndrome
<b>NP</b>	Nurse Practitioner
<b>RM</b>	Registered Midwife
<b>RMO</b>	Registered medical officer
<b>RN</b>	Registered Nurse
<b>SMO</b>	Senior Medical Officer/consultant
<b>SSRI</b>	Selective serotonin reuptake inhibitors
<b>SUDI</b>	Sudden unexpected death in infancy

## Management of Newborns Delivered to Drug Dependent Mothers

### 2 Clinical management

#### 2.1 Roles and responsibilities

**Senior Medical Officer; Resident Medical Officer; Nurse Practitioner**

- assess and prescribe appropriate medication

**Registered Midwife & Registered Nurse**

- perform Finnegan scoring on identified high risk infants for NAS/NOWS and report findings to NICU resident.
- Administer prescribed medication.
- Support mothers and whanau in caring for newborn

#### 2.2 Competency required

Registered Nurse; Registered Midwife; Registered Medical Officer.

#### 2.3 Equipment

Finnegan score sheet F1085WHF.

#### 2.4 Guideline

DO NOT GIVE NALOXONE AT DELIVERY as this will create an acute withdrawal

Admit infant under Neonatal Level 2 consultant

Infant can be admitted to postnatal ward with mum for observation period.

Where possible infant and mother should room-in together as much as possible in a quiet low stimulus environment, encouraging skin to skin and breastfeeding.

Finnegan scoring should be performed on infants delivered to drug dependent mothers every 3-4 hours, for a minimum of 72 hours following delivery.

**Non-pharmacological interventions** should be implemented prior to pharmacological prescriptions.

- Where possible infant and mother should room-in together as much as possible in a quiet low stimulus environment, encouraging skin to skin.
- Breastfeeding encouraged, only contraindicated with other maternal comorbidities e.g. HIV, chemotherapy, some medications used in psychosis.
- Breastfeeding support to be provided and Breastmilk substitutes can be offered with consent of mother until breastmilk supply established.
- Non-nutritive sucking e.g. pacifier, to assist in self-regulation of state. Can be removed once the infant is able to settle without.
- Swaddling/containment with hands and rocking, to support the infant in their state regulation.

Doc ID:	6435	Version:	01	Issue Date:	28 JAN 2022	Review Date:	28 JAN 2025
Facilitator Title:	Neonatal Nurse Practitioner			Department:	NICU		
IF THIS DOCUMENT IS PRINTED, IT IS VALID ONLY FOR THE DAY OF PRINTING							Page 4 of 8

---

**Management of Newborns Delivered to Drug Dependent Mothers**

---

**Assessment**

Other pathological conditions should be considered prior to commencing pharmacological interventions e.g. HIE, sepsis, hypoglycaemia, hypocalcaemia, hyperthyroidism

Pharmacological intervention indicated with raised Finnegan scores or clinical features

Finnegan score:

- consecutive scores >8 x 3 consecutive scores
- consecutive scores >12 x 2 consecutive scores
- Significant weight loss >10%, dehydration due to diarrhoea and vomiting

**Pharmacological interventions:****Oral morphine**

**Initial dosing** 40 micrograms/kg/dose 4 hourly PO

Can be increased by 40 micrograms/kg/dose to a maximum dosing of 200 micrograms/kg/dose

**Weaning dose** reduce by 10-15% of original dose every 48-72 hours

Aiming to maintain Finnegan scores <8

**Discontinuing morphine**

Stop morphine when dose is 40 micrograms/kg per day

**Do NOT weight adjust morphine dose during the weaning process.**

**Alternative therapy can be considered for withdrawal from non-opioid substances or to supplement the morphine dose.**

Clonidine – 1 microgram/kg/dose 4 hourly PO

**Weaning clonidine**

Do not adjust dose for weight during morphine weaning. Once morphine discontinued and Finnegan scores remain <8 then stop clonidine. If clonidine has been given regularly for >5 days, it should be reduced to approximately 50% day 1, 25% day 2 and discontinued day 3.

Doc ID:	6435	Version:	01	Issue Date:	28 JAN 2022	Review Date:	28 JAN 2025
Facilitator Title:	Neonatal Nurse Practitioner			Department:	NICU		
IF THIS DOCUMENT IS PRINTED, IT IS VALID ONLY FOR THE DAY OF PRINTING							Page 5 of 8

## Management of Newborns Delivered to Drug Dependent Mothers

### 2.5 Potential complications

- Significant weight loss >10%, dehydration due to vomiting and diarrhoea, seizures.
- Underlying pathological condition not identified
- Lack of parental bonding,
- Increased risk of SUDI
- Increased risk of NAI

### 2.6 After care

- Observe infant in hospital for 24-48hours following cessation of medication
- Paediatric OPD follow up 6-12 weeks following discharge
- Consider referral of mum to Drug and alcohol service
- Consider report of concern to Oranga Tamariki

## 3 Patient information

Provide management strategies for parents to cope with unsettled/crying infant  
 “Never Shake a Baby” education video

## 4 Evidence base

### 4.1 Summary of Evidence, Review and Recommendations

- McQueen, K. & Murphy-Oikonen, J. (2016). Neonatal abstinence syndrome. *The New England Journal of Medicine*. 374(25).2468-2479.
- Osborn, D., Jeffery, H. & Cole, M. (2010). Sedatives for opiate withdrawal in newborn infants. *Cochrane Database of Systemic Reviews*.  
<https://doi.org/10.1002/14651858.CD002053.pub3>
- Patrick, S.W., Barfield, W.D., & Poindexter, B.B. (2020). Neonatal opioid withdrawal syndrome. *American Academy of Pediatrics*. 146(5)
- Hudak, M.L. & Tan, R.C. (2012). Neonatal drug withdrawal. *Pediatrics*. 129(e540-e560)

Doc ID:	6435	Version:	01	Issue Date:	28 JAN 2022	Review Date:	28 JAN 2025
Facilitator Title:	Neonatal Nurse Practitioner			Department:	NICU		
IF THIS DOCUMENT IS PRINTED, IT IS VALID ONLY FOR THE DAY OF PRINTING							Page 6 of 8

## Management of Newborns Delivered to Drug Dependent Mothers

### 4.2 Bibliography

- Jansson, L.M. (2020). Neonatal abstinence syndrome. *UpToDate*  
[https://www.uptodate.com/contents/neonatal-abstinence-syndrome?search=neonatal%20abstinence%20syndrome&source=search\\_result&selectedTitle=1~111&usage\\_type=default&display\\_rank=1](https://www.uptodate.com/contents/neonatal-abstinence-syndrome?search=neonatal%20abstinence%20syndrome&source=search_result&selectedTitle=1~111&usage_type=default&display_rank=1)
- Phal, A., Young, L., Buus-Frank, M., Marcellus, L. & Soll, R. (2020). Non-pharmacological care for opioid withdrawal in newborns. *Cochrane Database of Systemic Reviews*. <https://doi.org/10.1002/14651858.CD013217.pub2>

### 4.3 Associated Waikato DHB Documents

- Finnegan score observation form
- NICU drug guideline Morphine hydrochloride-oral
- NICU drug guideline Clonidine

Doc ID:	6435	Version:	01	Issue Date:	28 JAN 2022	Review Date:	28 JAN 2025
Facilitator Title:	Neonatal Nurse Practitioner			Department:	NICU		
IF THIS DOCUMENT IS PRINTED, IT IS VALID ONLY FOR THE DAY OF PRINTING							Page 7 of 8

## Management of Newborns Delivered to Drug Dependent Mothers

### Appendix A – flowchart for Management of Neonatal Abstinence Syndrome

### Flow chart for management of NAS

