

Policy

# Clinical Guideline

## South Australian Perinatal Practice Guidelines – Infants of Drug Dependent Women

**Policy developed by:** SA Maternal & Neonatal Clinical Network

**Approved SA Health Safety & Quality Strategic Governance Committee on:**

8 October 2013

**Next review due:** 30 August 2016

**Summary** Guideline for the management of infants of drug dependent women

**Keywords** opioids, amphetamines, marijuana, cocaine, preterm birth, low birthweight, naloxone, hepatitis b, nas, detoxification, benzodiazepines, barbiturates, alcohol, phenobarbitone, hepatitis c, Perinatal Practice Guidelines, Infants of Drug Dependent Women, clinical guideline

**Policy history** Is this a new policy? **N**  
Does this policy amend or update an existing policy? **Y**  
Does this policy replace an existing policy? **Y**  
If so, which policies? Infants of Drug Dependent Women

**Applies to** All SA Health Portfolio  
All Department for Health and Ageing Divisions  
All Health Networks  
CALHN, SALHN, NALHN, CHSALHN, WCHN, SAAS  
Other

**Staff impact** All Clinical, Medical, Nursing, Allied Health, Emergency, Dental, Mental Health, Pathology

**PDS reference** CG113

---

### Version control and change history

Version	Date from	Date to	Amendment
1.0	17/03/2004	18/02/2008	Original version
2.0	18/02/2008	23/09/2013	Reviewed
3.0	23/09/2013	Current	



# South Australian Perinatal Practice Guidelines

# infants of drug dependent women

© Department of Health, Government of South Australia. All rights reserved.

## Note

This guideline provides advice of a general nature. This statewide guideline has been prepared to promote and facilitate standardisation and consistency of practice, using a multidisciplinary approach. The guideline is based on a review of published evidence and expert opinion.

Information in this statewide guideline is current at the time of publication.

SA Health does not accept responsibility for the quality or accuracy of material on websites linked from this site and does not sponsor, approve or endorse materials on such links.

Health practitioners in the South Australian public health sector are expected to review specific details of each patient and professionally assess the applicability of the relevant guideline to that clinical situation.

If for good clinical reasons, a decision is made to depart from the guideline, the responsible clinician must document in the patient's medical record, the decision made, by whom, and detailed reasons for the departure from the guideline.

This statewide guideline does not address all the elements of clinical practice and assumes that the individual clinicians are responsible for discussing care with consumers in an environment that is culturally appropriate and which enables respectful confidential discussion. This includes:

- The use of interpreter services where necessary,
- Advising consumers of their choice and ensuring informed consent is obtained,
- Providing care within scope of practice, meeting all legislative requirements and maintaining standards of professional conduct, and
- Documenting all care in accordance with mandatory and local requirements

**ISBN number:**  
**Endorsed by:**  
**Last Revised:**  
**Contact:**

978-1-74243-086-7  
South Australian Maternal & Neonatal Clinical Network  
23/09/13  
South Australian Perinatal Practice Guidelines Workgroup at:  
cywhs.perinatalprotocol@health.sa.gov.au

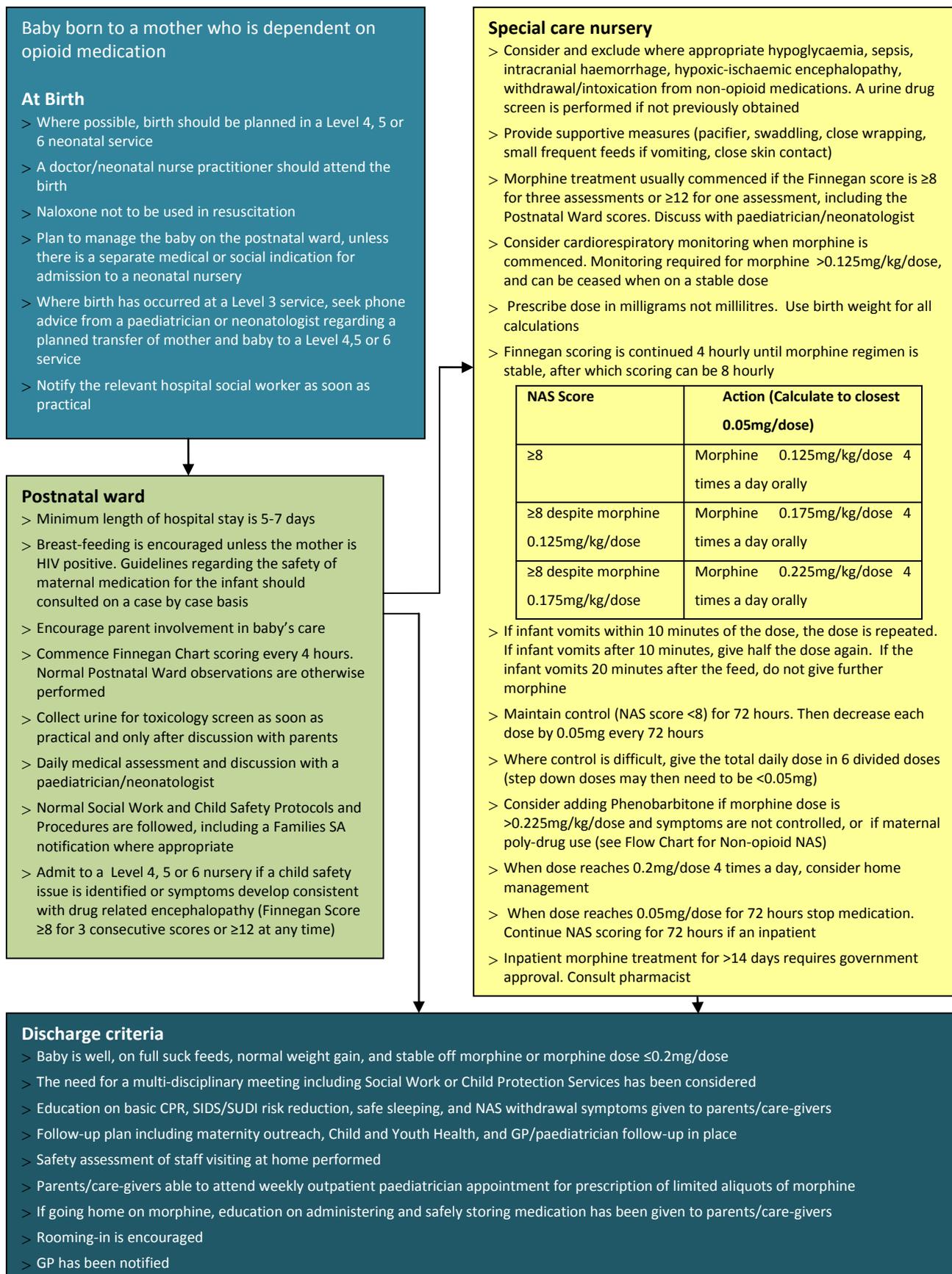


Government  
of South Australia  
SA Health

# South Australian Perinatal Practice Guidelines Infants of drug dependent women

© Department of Health, Government of South Australia. All rights reserved.

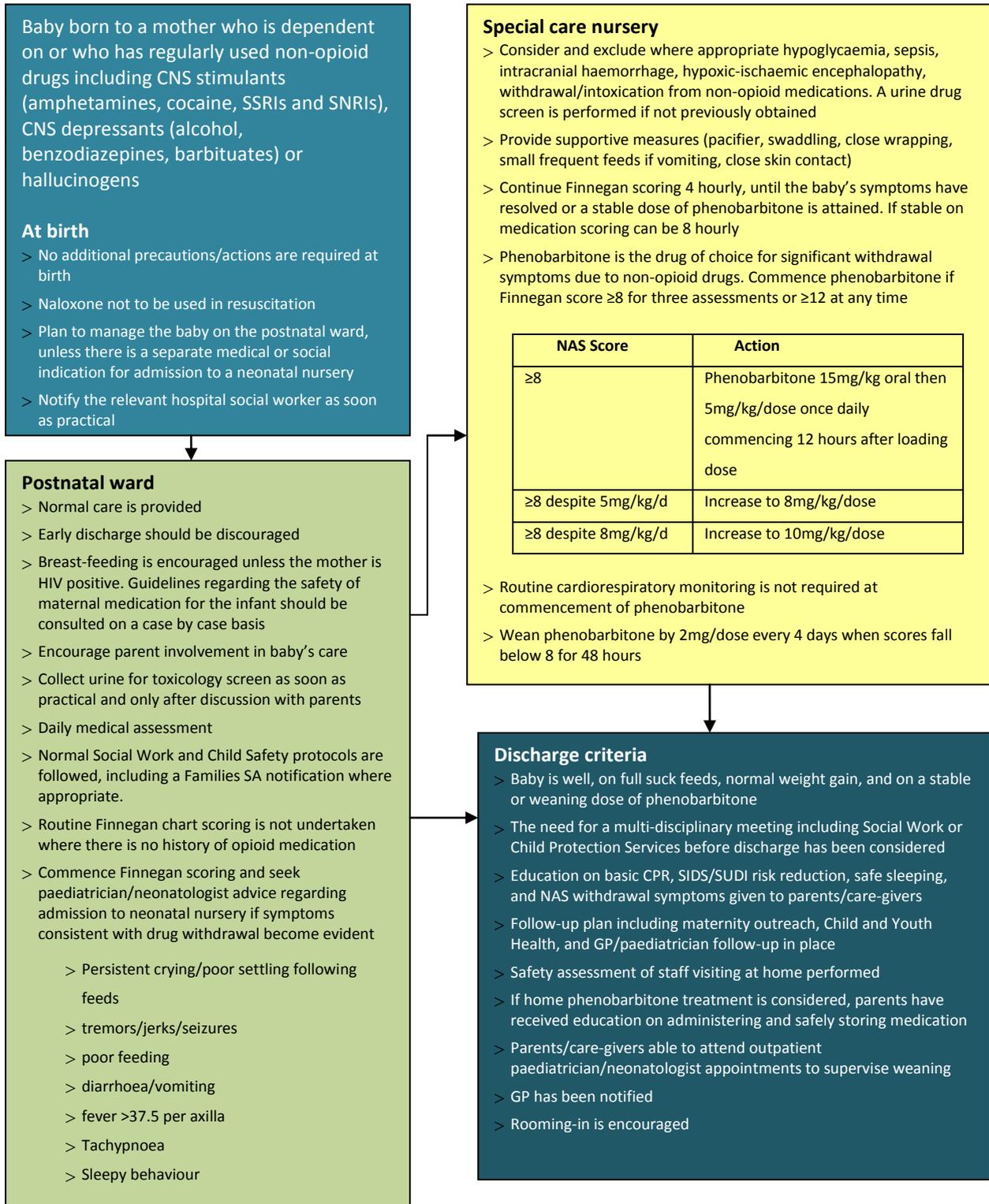
## 1. Flow chart for management of babies born to an **opioid** dependent mother



# South Australian Perinatal Practice Guidelines infants of drug dependent women

© Department of Health, Government of South Australia. All rights reserved.

## 2. Flow chart for management of babies born to **non-opioid** dependent mothers



## Introduction

- > Drug use in pregnancy has adverse effects on both mother and fetus due to both the direct effect of the drugs and the lifestyle linked to illicit drug dependence that frequently entails poor education, hygiene and nutrition, poverty and a chaotic personal life.
- > Consistency in management of drug dependent women and their babies is valuable.
- > Neonatal abstinence is the term applied to infants displaying signs and symptoms of drug withdrawal in the context of a mother dependent on illicit drugs and some prescribed medications.
- > Infants of mothers dependent on amphetamines may exhibit abnormal behaviour and poor feeding. In South Australia, injection of amphetamine and related substances (especially under the age of 25 years) has steadily increased to become the main drug used by injecting drug users.<sup>1,2</sup>
- > Heroin has a short half-life, and neonatal withdrawal often manifests in the first one or two days of life. Symptoms mainly affect the central nervous system and gastrointestinal system and include agitation, crying, frequent or poor feeding, poor weight gain, diarrhoea, fever and seizures.
- > Methadone substitution for heroin use in pregnancy results in improved fetal growth and survival, and less risk of preterm birth.<sup>3,4,5,6</sup> Methadone has a long half-life, and significant withdrawal may take up to 7 days to become apparent. Methadone withdrawal symptoms are the same as for heroin but tend to be more severe and of longer duration. The degree of withdrawal is not always related to maternal dose.
- > Buprenorphine is used as an alternative to methadone in some women because of research suggesting a shorter period of withdrawal. Most babies who demonstrate abstinence symptoms will do so in the first week.
- > Marijuana use in pregnancy may cause subtle neurobehavioural changes in babies but there is no defined abstinence syndrome.
- > Cocaine dependence can cause early irritability and later drowsiness in exposed babies.
- > Antidepressant medication is the commonest cause of drug withdrawal symptoms in infants. Agitation, jitteriness, myoclonus and seizures are described, commencing in the first 4 days and lasting for 2-3 days.
- > Not all women will divulge their drug use to health carers, partners and relatives. If an infant has symptoms consistent with opioid withdrawal, a careful history should be taken from the mother in private.
- > Infants suspected of opioid withdrawal should be examined thoroughly and other possible

## Associations with maternal use of drugs of dependence

- > There is no increase in fetal abnormality in mothers who use opioids, amphetamines, and marijuana
- > Cocaine use is linked to birth defects due to ischaemia related to vasoconstriction.
- > Preterm birth
- > Growth restriction and low birth weight
- > Neonatal withdrawal
- > Sudden infant death<sup>7,8</sup>

## Prenatal counselling

- > Prenatal counselling and preparation of a care plan is important
- > Essential aspects of prenatal counselling should include:
  - > The nature of withdrawal and the need for infants to remain in hospital for a minimum of 5-7 days where there is opioid dependence

**ISBN number:** 978-1-74243-086-7  
**Endorsed by:** South Australian Maternal & Neonatal Clinical Network  
**Last Revised:** 23/09/13  
**Contact:** South Australian Perinatal Practice Guidelines Workgroup at:  
 cywhs.perinatalprotocol@health.sa.gov.au

# Infants of drug dependent women

© Department of Health, Government of South Australia. All rights reserved.

- > The use of a neonatal abstinence syndrome (NAS) chart to monitor infant behaviour in the case of opioid withdrawal
- > The clinical criteria for initiating treatment with morphine
- > The need for social work involvement, and where the infant is considered high risk Families SA mandatory notification after birth

## Early management

- > A medical officer or neonatal nurse practitioner will attend all deliveries of opioid dependent mothers wherever possible
- > A medical officer need not attend deliveries where there is a history of non-opioid drugs of dependence
- > Naloxone is not to be used in resuscitation of babies born to opioid dependent mothers as it has the potential to cause life threatening withdrawal symptoms including seizures. Ineffective breathing or apnoea in the newly born is managed by positive pressure ventilation in accordance with ILCOR and Australian Resuscitation Council guidelines
- > The mother's hepatitis B, C and HIV status should be checked if not already done
- > If the infant is otherwise well, he/she should room in and be observed with mother on the postnatal ward
- > If the parents have not received prenatal counselling, the aspects noted above should be broached
- > Abstinence scoring using a Neonatal Abstinence Score chart is commenced on the Postnatal Ward where there is a maternal opioid dependence
- > The baby should be reviewed daily by a medical officer or neonatal nurse practitioner
- > Social work services should be notified
- > Obtain verbal informed consent from mother for neonatal hepatitis B vaccination and administer according to hospital policy
- > Hepatitis B immunoglobulin 100 international units and hepatitis B vaccine should both be given as per NHMRC recommendations on the day of birth if mother is HBsAg positive or if hepatitis B status is unknown and urgent serology is unable to determine antigen status. This regimen is 90% protective
- > Urine toxicology screening is useful to determine which drugs the infant has been recently exposed to in utero where this is unclear from maternal history. Verbal consent for the urine drug screen is required and consent should be documented in the Medical Record. The test should not be taken if parental consent is not obtained, unless there is a legal directive requiring the test

## Neonatal abstinence syndrome

- > If mother is known to be heroin dependent, on methadone treatment or dependent on opioids for other reasons such as chronic pain, the neonate is observed for evidence of the neonatal abstinence syndrome (NAS)
- > Neonatal abstinence syndrome is scored using a NAS score chart (a modified Finnegan scoring system), as a guide to treatment with morphine or other sedatives
- > Supportive measures (using a pacifier, swaddling, close wrapping, small frequent feeds, providing close skin contact) are important adjuncts to medical treatment

## Assessment procedure for abstinence

- > Commence evaluation of signs of neonatal withdrawal using NAS score chart within two hours of birth or sooner if signs of withdrawal are evident
- > Evaluate baby every 4 hours. Base scoring on the baby's behaviour / symptoms for the previous 4 hours
- > Perform scoring ½ to 1 hour after baby has been fed

**ISBN number:** 978-1-74243-086-7  
**Endorsed by:** South Australian Maternal & Neonatal Clinical Network  
**Last Revised:** 23/09/13  
**Contact:** South Australian Perinatal Practice Guidelines Workgroup at:  
 cywhs.perinatalprotocol@health.sa.gov.au

# Infants of drug dependent women

© Department of Health, Government of South Australia. All rights reserved.

- > Babies with an abstinence score of 8 or more for three consecutive scores or  $\geq 12$  at any time should be discussed with a neonatologist or paediatrician and routinely transferred to a Level 4, 5 or 6 nursery
- > The neonatologist/paediatrician should consider and exclude where appropriate hypoglycaemia, sepsis, intracranial haemorrhage, hypoxic-ischaemic encephalopathy, withdrawal/intoxication from non-opioid medications. A urine drug screen is performed if not previously obtained
- > If there are inconsistencies in the scores, the baby may be observed for a period of time in a level 4, 5 or 6 nursery to ensure morphine treatment is truly indicated
- > It is important that the mother is actively involved in the scoring process to facilitate on-going care for the infant. Staff should discuss each sign as it is assessed
- > Commencement of morphine should only occur in a level 4, 5 or 6 nursery with supervision by paediatrician or neonatologist
- > Cardiorespiratory or oximetry monitoring should be considered at the commencement of morphine treatment, and is required at morphine doses  $>0.125\text{mg/kg/dose}$ . Where monitoring is commenced it should be continued until there is a stable regimen
- > Note that the NAS chart is of limited use in the premature infant.

## Morphine treatment

Score	Dosage (oral)
$\geq 8$	Morphine $0.125\text{mg/kg/dose}$ 4 times a day orally
$\geq 8$ despite $0.125\text{mg/kg/dose}$	Morphine $0.175\text{mg/kg/dose}$ 4 times a day orally
$\geq 8$ despite $0.175\text{mg/kg/dose}$	Morphine $0.225\text{mg/kg/dose}$ 4 times a day orally

- > Where control is difficult give the total daily dose in 6 divided doses (step-down doses may then need to be  $<0.05\text{mg}$ )
- > Consider adding phenobarbitone if morphine dose is  $>0.225\text{mg/kg/dose}$  or if there is maternal poly-drug use

**Please note that all doses for the entire period of withdrawal management are calculated on the basis of birth weight and not of current weight**

- > Once abstinence has been controlled (three consecutive scores  $< 8$ ), using this dosage regimen, implement the following:
  - > Maintain control for 72 hours
  - > Initiate the detoxification process by decreasing the total daily dose by  $0.05\text{mg}$  every 72 hours
  - > When dosage levels reach  $0.2\text{mg/dose}$  – maintain this dose for 72 hours. At this dose, consideration can be given to home management
  - > When oral morphine treatment is discontinued, the NAS scoring should continue for a further 72 hours if an inpatient

## Vomiting in association with morphine dosing:

- > Ensure baby is not being overfed
- > Ensure baby is appropriately postured during and after feeding

**ISBN number:** 978-1-74243-086-7  
**Endorsed by:** South Australian Maternal & Neonatal Clinical Network  
**Last Revised:** 23/09/13  
**Contact:** South Australian Perinatal Practice Guidelines Workgroup at:  
 cywhs.perinatalprotocol@health.sa.gov.au

- > Give morphine before the feed

*If baby has a large vomit after being given morphine:*

- > Re-dose if baby vomits within 10 minutes after a dose
- > Give ½ dose if baby vomits 10 -20 minutes after a dose
- > If baby vomits >20 minutes after feed, do not give further morphine (always err on side of caution)

## Regulation of the prescription of morphine syrup

The Drugs of Dependence Unit regulates the prescription of morphine for treatment of neonatal abstinence in the context of maternal opioid dependence. The following points should be noted:

- > Authority for prescription of morphine syrup for NAS is restricted to qualified paediatricians
- > Authority to prescribe requires written application to the Drugs of Dependence Unit (DDU) from the treating paediatrician in the following circumstances:
  - > where inpatient therapy in a public hospital is longer than 14 days
  - > pre-discharge, where treatment is to be continued in the community and discharge is prior to 14 days
  - > where treatment is commenced in a private hospital
  - > where treatment is continued in a private hospital by a paediatrician other than the authorised paediatrician who commenced treatment in the public hospital
- > Authority is given for a period of 60 days. An individual authority with a unique number is required for each new patient
- > Authority is given subject to the use of morphine syrup in accordance with this Perinatal Practice Guideline or a hospital approved guideline for abstinence treatment
- > Authority can be obtained irrespective of parental consent, although consent is desirable
- > Exemptions to the requirement for authority are as follows:
  - > where inpatient treatment for abstinence in a government hospital is less than 14 days
  - > where morphine is prescribed as an inpatient or outpatient as part of a pain or palliative care treatment plan, in which circumstances authority is not required for a period of up to 2 months
- > Other paediatricians employed at the same or another public hospital, or a community general practitioner where a paediatrician considers this appropriate, may be a locum prescriber for the authorised prescriber provided this locum:
  - > undertakes due care in assessing the baby's treatment including practicing within approved guidelines and consulting appropriately with a paediatrician
  - > complies with the conditions of the authority
  - > refers to a paediatrician if three or more consecutive doses of morphine are missed
- > Application forms are available from [www.dassa.sa.gov.au](http://www.dassa.sa.gov.au), and are forwarded to the DDU. An authority is then issued to the paediatrician and a copy forwarded to the hospital pharmacist

## Non-opioid withdrawal

**ISBN number:** 978-1-74243-086-7  
**Endorsed by:** South Australian Maternal & Neonatal Clinical Network  
**Last Revised:** 23/09/13  
**Contact:** South Australian Perinatal Practice Guidelines Workgroup at: [cywhs.perinatalprotocol@health.sa.gov.au](mailto:cywhs.perinatalprotocol@health.sa.gov.au)

# Infants of drug dependent women

© Department of Health, Government of South Australia. All rights reserved.

- > If the mother does not use opioid drugs but uses central nervous system stimulants (amphetamines, cocaine, SSRIs, SNRIs) or depressants (e.g. benzodiazepines and alcohol) the neonate is observed for evidence of the neonatal abstinence syndrome (NAS) on the Post-natal Ward
- > The NAS chart is not validated for the assessment of withdrawal with non-opioid drugs but can still be of use in clinical decision making
- > Neonatal abstinence syndrome is not routinely scored with NAS score chart, but scoring is commenced if the baby exhibits signs consistent with NAS (persistent crying/poor settling following feeds, tremors/jerks/seizures, poor feeding, diarrhoea/vomiting, fever >37.5°C per axilla, tachypnoea, sleepy behaviour)
- > The assessment procedures using the NAS chart are as described under opioid NAS
- > Babies with an abstinence score of 8 or more for three consecutive scores or ≥12 at any time should be discussed with a neonatologist/paediatrician and consideration given to transferring to a Level 4, 5 or 6 nursery
- > Phenobarbitone is the drug of choice for significant non-opioid NAS
- > If there are inconsistencies in the scores, the baby may be observed for a period of time in a level 4,5 or 6 nursery to ensure phenobarbitone treatment is truly indicated
- > It is important that the mother is actively involved in the scoring process to facilitate on-going care for the infant. Staff should discuss each sign as it is assessed
- > Commencement of phenobarbitone should only occur in a level 4, 5 or 6 nursery with supervision by paediatrician or neonatologist
- > Cardiorespiratory or oximetry monitoring is not routinely required at the commencement of phenobarbitone
- > Where a mother is on a combination of methadone and benzodiazepines and the infant is not settling with morphine treatment alone, the addition of phenobarbitone treatment may be helpful in the management of withdrawal symptoms

## Phenobarbitone Treatment

Score	Dosage (oral)
≥8	15 mg/kg oral, then 5 mg/kg/dose orally once daily commencing 12 hours after loading dose
≥8 despite 5mg/kg/dose once daily	Increase to 8 mg/kg/dose orally once daily
≥8 despite 8mg/kg/dose once daily	Increase to 10 mg / kg / day in 2 divided doses orally

- > After scores fall below treatment level for 48 hours, the dose should be reduced by 2 mg per dose every 4th day or longer depending on scores

## Breastfeeding

- > see PPG: breastfeeding for women using alcohol, tobacco and other drugs, and to guidelines for breast feeding in the context of specific maternal infections

## Maternal and neonatal discharge

- > Women with drug dependency will require significant post-natal education, on-going support after discharge, and the safety of their infant after discharge must be considered and ensured. Refer to PPG on discharge and follow up of women with significant psychosocial needs
- > Where babies are at risk of opioid withdrawal, mothers and their babies are routinely

**ISBN number:** 978-1-74243-086-7  
**Endorsed by:** South Australian Maternal & Neonatal Clinical Network  
**Last Revised:** 23/09/13  
**Contact:** South Australian Perinatal Practice Guidelines Workgroup at:  
 cywhs.perinatalprotocol@health.sa.gov.au



Government  
of South Australia

SA Health

# Infants of drug dependent women

© Department of Health, Government of South Australia. All rights reserved.

observed as in-patients for at least five to seven days before being discharged

- > Mothers who continue active use of heroin and who are not on a methadone or buprenorphine program, who are at current risk of domestic violence, who have poor social supports or who have been identified by social work or nursing staff as having inappropriate coping or caring skills are of serious concern from a child protection viewpoint and require a comprehensive Social Work and Child Protection Unit assessment before discharge
- > While outpatient management of abstinence may be considered when morphine doses reach 0.2mg/dose and the baby's symptoms are well controlled, families for whom home management is appropriate need to be selected carefully. A risk assessment should be performed before discharge on a case by case basis following a multidisciplinary case meeting, and a clear plan formulated with the parents or carers for regular outpatient review and pharmacy dispensing of limited aliquots of oral morphine
- > The safety of staff visiting at home should be addressed before discharge in planning meetings
- > Discourage the practice of mother and baby sleeping in the same bed as narcotic medication increases the risks of asphyxiation of a baby due to overlying
- > Rooming in for 24-48 hours is encouraged where there has been separation from mother to assist with assessment of mothercraft skills, psychological stability, and for general education and specific instruction regarding administration of medications
- > The parents should be counselled regarding the need for hepatitis C screening of their child at 12-18 months where the mother is hepatitis C positive
- > Infants of mothers who are HBsAg positive require hepatitis B serology at 8 months of age to document seroconversion and the efficacy of vaccination

## Discharge criteria for babies with NAS, and for babies where their mother is dependent on opioid or non-opioid medication social work assessment indicates an infant at high risk

- > Baby is well, on full suck feeds, normal weight gain, and stable off morphine or morphine dose  $\leq 0.2\text{mg/dose}$ , or on a stable phenobarbitone dose
- > Multi-disciplinary meeting including Social Work or Child Protection Services has occurred
- > Education on basic CPR, SIDS/SUDI risk reduction, safe sleeping, and NAS withdrawal symptoms given to parents/care-givers
- > Follow-up plan including maternity outreach, Child and Youth Health, and GP/paediatrician follow-up in place
- > Safety assessment of staff visiting at home performed
- > Parents/care-givers able to attend weekly outpatient paediatrician appointment for prescription of limited aliquots of morphine and clinical assessment. Less frequent review may be appropriate for babies on phenobarbitone
- > If going home on morphine or phenobarbitone, education on administering and safely storing medication has been given to parents/care-givers
- > Baby and family have been discussed with the GP

## Follow up

- > Weekly paediatrician or neonatologist outpatient review is required for babies with NAS who are on morphine medication
- > Domiciliary midwifery visits should occur for the first week or two after discharge from hospital. The frequency and duration of visits will need to be assessed on an individual basis.
- > CYH visits should occur as part of universal home visiting, and a home assessment made by the CYH nurse of the appropriateness of sustained Family Home Visiting
- > Hepatitis C screening is done at 12-18 months where the mother is hepatitis C positive
- > Hepatitis B serology is done at about 8 months of age where the mother is HBsAg positive

**ISBN number:** 978-1-74243-086-7  
**Endorsed by:** South Australian Maternal & Neonatal Clinical Network  
**Last Revised:** 23/09/13  
**Contact:** South Australian Perinatal Practice Guidelines Workgroup at:  
 cywhs.perinatalprotocol@health.sa.gov.au

## References

1. Drug and Alcohol Services Council (DASC). Illicit drug use in South Australia 2002. A statistical overview. South Australia; May 2002.
2. Longo M, Christie P, Ali R, Humeniuk R, editors. South Australian drug trends 2002. Findings from the illicit drug reporting system (IDRS). National Drug and Alcohol Research Centre (NDARC) technical report No. 146. South Australia; 2003.
3. Finnegan L. Treatment issues for opioid-dependent women during the perinatal period. *Journal of Psychoactive Drugs* 1991; 23:199-201.
4. Fraser A, Cavanagh S. Pregnancy and drug addiction-long term consequences. *J Royal Soc of Med* 1991; 84: 530-32.
5. Wang EC. Methadone treatment during pregnancy. *JOGNN* 1999; 28: 615- 622.
6. Llewelyn RW. Substance abuse in pregnancy: the team approach to antenatal care. *The Obstetrician and Gynaecologist* 2000; 2: 11 – 15.
7. Weintraub Z, Bental Y, Oliven A, Rotschild A. Neonatal withdrawal syndrome and behavioural effects produced by maternal drug use. *Addiction Biology* 1998; 3: 159-70.
8. Curet LB, Andrew C. Drug abuse during pregnancy. *Clinical Obstetrics and Gynecology* 2002; 45: 73 – 85.
9. Cernerud L, Eriksson M, Jonsson B, Steneroth G, Zetterström. Amphetamine addiction during pregnancy: 14 year follow-up of growth and school performance. *Acta Paediatr* 1996; 85: 204-8 (Level III-2).
10. Alcohol Tobacco and Other Drugs (ATOD). Guidelines for nurses and midwives. A framework for policy and standards and clinical guidelines. Version 2 Flinders University and Drug and Alcohol Services Council. South Australia; 2003.
11. National Clinical Guidelines for the Management of Drug Use During Pregnancy, Birth and the Early Development Years of the Newborn. NSW Department of Health. [http://www.health.nsw.gov.au/pubs/2006/pdf/ncg\\_druguse.pdf](http://www.health.nsw.gov.au/pubs/2006/pdf/ncg_druguse.pdf)

**ISBN number:**  
**Endorsed by:**  
**Last Revised:**  
**Contact:**

978-1-74243-086-7  
 South Australian Maternal & Neonatal Clinical Network  
 23/09/13  
 South Australian Perinatal Practice Guidelines Workgroup at:  
[cywhs.perinatalprotocol@health.sa.gov.au](mailto:cywhs.perinatalprotocol@health.sa.gov.au)

## Abbreviations

ATOD	Alcohol Tobacco and Other Drugs
CPR	Cardiopulmonary resuscitation
CYH	Child and Youth Health
DASSA	Drug and Alcohol Services South Australia
DDU	Drugs of dependence unit
e.g.	For example
GP	General practitioner
HBsAG	Hepatitis B surface antigen
HIV	Human immunodeficiency virus
ILCOR	International Liaison Committee on Resuscitation
IU	International units
kg	Kilogram(s)
mg	Milligram(s)
NAS	Neonatal abstinence syndrome
NHMRC	National Health and Medical Research Council
%	Percent
PPG	Perinatal Practice Guideline(s)
SA	South Australia
SIDS	Sudden infant death syndrome
SNRIs	Serotonin and norepinephrine reuptake inhibitors
SSRIs	Selective serotonin reuptake inhibitors
SUDI	Sudden unexpected death in infancy

**ISBN number:**  
**Endorsed by:**  
**Last Revised:**  
**Contact:**

978-1-74243-086-7  
 South Australian Maternal & Neonatal Clinical Network  
 23/09/13  
 South Australian Perinatal Practice Guidelines Workgroup at:  
[cywhs.perinatalprotocol@health.sa.gov.au](mailto:cywhs.perinatalprotocol@health.sa.gov.au)

# Infants of drug dependent women

© Department of Health, Government of South Australia. All rights reserved.

Modified Finnegan

WARD

withdrawal scale

UNIT NO

SURNAME

OTHER NAMES

DOB / SEX

DATE AND TIME IN HOURS

SYSTEM	SIGNS & SYMPTOMS	SCORE																		
CENTRAL NERVOUS SYSTEM DISTURBANCES	High-Pitched Cry	2																		
	Continuous High-Pitched Cry	3																		
	Sleeps < 1 hour after feeding	3																		
	Sleeps < 2 hours after feeding	2																		
	Sleeps > 3 hours after feeding	1																		
	Mild Tremors Disturbed	1																		
	Mod-Severe Tremors Disturbed	2																		
	Mild Tremors Undisturbed	3																		
	Mod-Severe Tremors Undisturbed	4																		
	Increased Muscle Tone	2																		
	Excoriation (specify area)	1																		
METABOLIC / VASOMOTOR / RESPIRATORY DISTURBANCES	Myoclonic Jerks	3																		
	Generalised Convulsions	5																		
	Fever (37.3°C – 38.3°C)	1																		
	Fever (38.4°C and higher)	2																		
	Frequent Yawning (>3-4 times)	1																		
	Nasal Stuffiness	1																		
	Sneezing (>3-4 times)	1																		
	Nasal Flaring	2																		
Respiratory Rate > 60 / min	1																			
Respiratory Rate > 60 / min with retractions	2																			
GASTROINTESTINAL DISTURBANCES	Excessive sucking	1																		
	Poor Feeding	2																		
	Regurgitation	2																		
	Projectile Vomiting	3																		
	Loose Stools	2																		
Watery Stools	3																			
	<b>Max Score: 41</b>																			
	<b>TOTAL SCORE</b>																			
	<b>SCORER'S INITIALS</b>																			

NEONATAL WITHDRAWAL SCORING CHART (TERM INFANTS)

ISBN number: 978-1-74243-086-7  
 Endorsed by: South Australian Maternal & Neonatal Clinical Network  
 Last Revised: 23/09/13  
 Contact: South Australian Perinatal Practice Guidelines Workgroup at: cywhs.perinatalprotocol@health.sa.gov.au



## Neonatal abstinence syndrome (NAS) scoring chart

### Guidelines for NAS scoring

The score should be based on the baby's behaviour / symptoms for the previous 4 hours

Some scales are of increasing severity and only 1 score should be made for each category

1. **High pitched cry:** Score 2 if a cry is high-pitched at its peak, score 3 if a cry is high-pitched throughout.
2. **Sleep:** Consider total amount of time baby was asleep between feeds.
3. **Tremors:** Undisturbed sleep means when the baby is asleep or at rest in a cot.
4. **Increased muscle tone:** Score if the baby has a generalised muscle tone greater than the upper limit of normal.
5. **Excoriation:** Score if there is a new area of excoriation during the scoring period.
6. **Nasal flaring:** Score if nasal flaring is present without other evidence of airways disease.
7. **Respiratory rate:** Score if respiratory rate is greater than 60 per minute asleep without other evidence of respiratory illness.
8. **Excessive sucking:** Score if the baby sucks more than average.
9. **Poor feeding:** Score if the baby is very slow to feed or takes inadequate amounts.
10. **Regurgitation:** Score only if the baby regurgitates more frequently than usual in newborn infants.

Modifications for prematurity are mainly necessary in the sections on sleeping, e.g. a baby who needs three-hourly feeds can only sleep at most 2.5 hours between them. Scoring should be 1 if the baby sleeps less than two, 2 if sleeps less than one hour, and 3 if the baby does not sleep between feeds. Many premature babies require tube feeding. Babies should not be scored for poor feeding if tube feeding is customary for their period of gestation.

Babies with an abstinence score of 8 or more for three consecutive scores  $\geq 12$  at any time should be treated for NAS.