

Neonatal Abstinence Syndrome (NAS)

WOMEN AND NEWBORN
DRUG AND ALCOHOL SERVICE (WANDAS)





Neonatal Abstinence Syndrome

The information in this booklet is to help you understand the medical and nursing management of your baby's drug withdrawal (Neonatal Abstinence Syndrome).

A new baby is no longer exposed to the medications and drugs taken by the mother during pregnancy and can result in the baby developing signs of withdrawal.

It is impossible to predict which babies will experience Neonatal Abstinence Syndrome (NAS). There are factors that can be helpful when observing a baby for signs of NAS.

The time it takes for signs of NAS to begin to show depends on:

- The dose of methadone, buprenorphine or other opiates the mother is taking.
- Whether any other drugs have been used, particularly in the last three days before the birth eg. opiates (heroin), amphetamines, marijuana.

The majority of babies who experience NAS show signs within 24-72 hours after birth.

Signs of NAS

<ul style="list-style-type: none">• High pitched cry	<ul style="list-style-type: none">• Irritability
<ul style="list-style-type: none">• Tremor/jittering	<ul style="list-style-type: none">• Sleeping difficulties
<ul style="list-style-type: none">• Stuffy nose	<ul style="list-style-type: none">• Sneezing
<ul style="list-style-type: none">• Feeding difficulties due to sucking problems	<ul style="list-style-type: none">• Tense arms, legs and back
<ul style="list-style-type: none">• Poor weight gain	<ul style="list-style-type: none">• Vomiting/diarrhoea
<ul style="list-style-type: none">• Increased breathing rate	<ul style="list-style-type: none">• Skin irritation

A diagnosis of NAS is made when a baby displays a combination of these signs.

Some of these signs may also be seen in babies who are experiencing other problems so your baby will be closely checked to confirm NAS.

The length of the withdrawal process can depend on:

- The quality, amount and mixing of different types of drugs e.g. methadone/heroin, methadone/heroin/benzodiazepines, buprenorphine/heroin, amphetamines.
- NAS can last from one week to six months.
- **Stopping or reducing your drug use during pregnancy will help to decrease the likelihood and severity of any withdrawal symptoms experienced by your baby.**

Before your baby is born and during your time in hospital, the nursing staff will discuss ways you can help your baby if he/she is withdrawing. This includes wrapping your baby for comfort or correct positioning to aid feeding and settling (see the information sheet on page 5 in this booklet).

NAS scoring

After the birth, your baby is usually transferred with you to the postnatal ward. The midwives will use a NAS scoring chart to assess your baby for signs of withdrawal every four hours.

This is a system used by staff to assess the severity of a baby's withdrawal symptoms. See example of the NAS scoring chart on page 7-8.

If the score is repeatedly eight or higher, the doctor is notified. It may be necessary to transfer your baby to Special Care Nursery (SCN) and/or give your baby medication.

Medication

Medication such as morphine or phenobarbitone may be prescribed to decrease the baby's symptoms of NAS and reduce the possibility of convulsions. Ideally the medication will make the baby more settled without becoming drowsy.

The dose prescribed for your baby will depend on:

- the NAS scores
- the baby's weight.

The process of scoring, assessing and reducing (weaning) the medication continues until the baby has ceased to have signs of withdrawal. Each baby is different in how they respond to being weaned off the medication.

Babies on medication will need to stay in hospital for at least a week and sometimes longer. Some babies are discharged on medication and require follow up by the home visiting nurse and at the paediatric clinic.

IT IS VERY IMPORTANT TO KEEP FOLLOW-UP APPOINTMENTS

Admission to Special Care Nursery

This occurs when babies have severe symptoms of drug withdrawal. They need close medical supervision and nursing care to reduce their discomfort and the risk of complications such as convulsions (fits).

You can help your baby by staying with them in the nursery as much as possible to feed, settle and hold your baby. Many parents find their baby settles easier when handled gently and held close.

Parent's feelings when their baby experiences NAS

Many parents describe the time their baby spends in withdrawal as an emotional roller coaster.

The staff acknowledges and understands that this is a very stressful and emotional time. Take comfort in the knowledge that we all have the same goal - to help you and your baby through the withdrawal and go home as soon as possible. Please let staff know if you require further support.

Behaviour Patterns

Behaviour	Calming Suggestions
Prolonged crying (may be high pitched)	<ul style="list-style-type: none"> • Hold baby close to your body, perhaps wrapped in a sheet. • Decrease loud noises, bright lights, excessive handling etc. • Humming, gentle rocking may help.
Sleeplessness	<ul style="list-style-type: none"> • Reduce noise, bright lights, patting or touching baby too much. • Soft, gentle music/rocking may help. • Clean nappy/dry bottom - check for nappy rash or skin irritation • nappy rash cream or zinc cream as needed. • Feed baby on demand.
Excessive sucking of fists	<ul style="list-style-type: none"> • Cover hands with gloves or mittens if skin becomes damaged. • Keep areas of damaged skin clean (avoid lotions/creams as the baby may suck them).
Difficult or poor feeding	<ul style="list-style-type: none"> • Feed small amounts often. • Feed in quiet, calm surroundings with minimal noise and disturbance. • Allow time for resting between sucking.
Sneezing, stuffy nose or breathing troubles	<ul style="list-style-type: none"> • Keep baby's nose and mouth clean. • Avoid overdressing or wrapping the baby too tightly. • Feed the baby slowly, allowing for rest periods between feeds. • Smaller feeds more often may help. • Keep baby in a semi-sitting position, well supported and supervised. • Don't place your baby to sleep on its tummy.

Sneezing, stuffy nose or breathing troubles continued...	<ul style="list-style-type: none"> • If breathing difficulties continue or worsen, please contact your GP or PMH on (08) 9340 8222, 24 hours a day and you will be put through to the Emergency Department.
Regurgitation and/or vomiting	<ul style="list-style-type: none"> • Burp the baby each time he/she stops sucking and after the feed. • Support the baby's cheeks and lower jaw to enhance sucking/swallowing efforts. • Keep baby clean and bedding free of vomit. The smell may increase the problem and the vomit may irritate your baby's skin.
Hyperactivity	<ul style="list-style-type: none"> • Use soft flannel blankets or a short haired sheep skin covered by a cotton sheet for baby's comfort.
Trembling	<ul style="list-style-type: none"> • Keep baby in a warm quiet room. • Avoid excessive handling of baby.
Fever (Temperature over 37°)	<ul style="list-style-type: none"> • Keep clothing to a minimum. • Avoid excessive bedclothes. • Seek medical help if temperature stays elevated for more than four hours or if other symptoms develop.

When you go home

The symptoms of NAS may continue for longer than a week and possibly up to six months. Over this time the symptoms gradually decrease in intensity.

Once at home your baby may continue to experience:

- difficulty with attachment during breastfeeding
- colic
- poor sleeping patterns
- slow weight gain.

It is helpful to feed and settle your baby in a quiet room with minimal noise and disturbance.

Safe sleeping

DO NOT sleep with your baby in the same bed or couch if you have used any drugs, alcohol or medication that makes you sleepy. There is a risk the baby may fall out of the bed or be suffocated.

For more information see 'sleeping with your baby' www.cyh.com

Before discharge from hospital you will be given a child health book. This book contains the location of your local Child Health Clinic. The Child Health Nurse will provide support and advice until your baby reaches school age.

If you are concerned or worried about your baby's health inform your partner, GP, Child Health Nurse or Princess Margaret Hospital.

Neonatal Abstinence Syndrome score sheet

On the next page is an example of the score sheet used by nursing staff.
From L. Finnegan et al Addictive Diseases 2(1): 141-158, 1975

Signs and symptoms		Score			
Excessive high pitched cry (<5 mins)	2				
Continuous high pitched cry (>5mins)	3				
Sleeps < 1 hour after feeding	3				
Sleeps < 2 hours after feeding	2				
Sleeps < 3 hours after feeding	1				
Hyperactive Moro reflex	2				
Markedly hyperactive Moro reflex	3				
Mild tremors when disturbed	1				
Moderate-severe tremors when disturbed	2				
Mild tremors when undisturbed	3				
Moderate-severe tremors when undisturbed	4				
Increased muscle tone	1				
Excoriation (eg chin, knees, elbows, toes, nose)	1				
Myoclonic jerks (twitching/jerking of limb/s)	3				
Generalised convulsion	5				
Sweating	1				
Hyperthermia (37.2 - 38.2° C)	1				
Hyperthermia (≤38.4° C)	2				
Frequent yawning (>3-4/interval)	1				
Mottling	1				
Nasal stuffiness	1				
Frequent sneezing (>3-4/interval)	1				
Nasal flaring	2				
Respiratory rate > 60/min	1				
Respiratory rate > 60/min with retractions	2				
Excess sucking	1				
Poor feeding (infrequency/incoordinate suck)	2				
Regurgitation (≥ 2 times during feed/post feed)	2				
Projectile vomiting	3				
Loose stools (curdy/seedy appearance)	2				
Watery stools (water ring on nappy around stool)	3				
TOTAL SCORE					
Date/Time					

Support Services

WANDAS	(08) 9340 2222 Page 3425
Breastfeeding Centre of WA KEMH counselling and appointment service 9.00am to 4.00pm Monday to Friday (except public holidays)	(08) 9340 1844
PEPISU PROJECT Pregnancy, early parenting & illicit substance use. They provide support, information, counselling and outreach services for women. 9.00am to 4.30pm Monday to Thursday	(08) 9227 9032 or Mobile: 0407 440 557 Freecall: 1800 246 655
ADIS - Alcohol and Drug Information Service Anonymous service 24 hour phone service	(08) 9442 5000 1800 198 024
Next Step - for treatment of adults 9.00am to 4.00pm Monday to Friday	(08) 9219 1919
Ngala Family Resource Centre (help line) 8.00am to 8.00pm daily	(08) 9368 9368
Parent Help Centre 24 hour phone service	(08) 6279 1200 1800 654 432
Princess Margaret Hospital for Children	(08) 9340 8222
Women and Newborn Health Library	(08) 9340 1100
Psychological Medicine	(08) 9340 1521



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