

Clinical Guideline: Neonatal Abstinence Guideline

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For use in: EoE Neonatal Units
Guidance specific to the care of neonatal patients.

Used by: Medical teams, ANNPs, Midwives, Nurses, Nursery Nurses, MSW, Allied Health Professionals, psychological professionals.

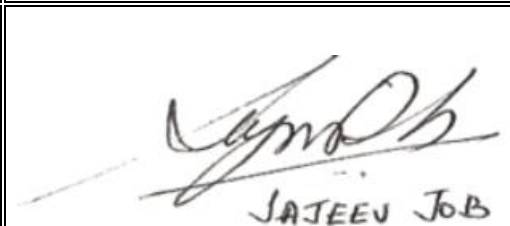
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Language The EoE Neonatal ODN is committed to continuously fostering a diverse environment. We acknowledge the effect language can have on individuals and populations. For simplicity of language, this guideline uses the terms woman and mother throughout, but this should be taken to also include people who do not identify as women but who are pregnant, in labour and in the postnatal period. The term breastfeeding is also used but should be taken to include those who term this method of feeding as chest or body feeding. Please always take time to make sure you are using the preferred pronouns and terminology of the patient and their support network

Audit Standards:

Each neonatal service should consider monitoring the following audit points:

Clinical outcomes

- Proportion of opioid exposed infants receiving pharmacologic therapy.
- Median length of stay (LOS) for infants with NAS/NOWS.
- Readmission rate within 30 days post discharge.
- Breastfeeding/expressed breast milk rates at discharge.

Family centred outcomes

- Hours of parental presence per day (recorded via ESC flowsheet).
- Parent reported satisfaction with care (local survey/feedback).

Process measures

- Inter-rater reliability percentage (Please see appendix 5).
- Staff ESC training compliance rates.
- Timeliness of team huddles when ESC thresholds triggered.

Governance

Escalation of concerns, any deviation from protocol, unexpected adverse event, or persistent difficulty in implementation must be escalated to the unit's governance committee and through ODN exceptions included at the back of this guidance.

1. Purpose

To provide evidence-based guidance for the assessment and management of infants with Neonatal Abstinence Syndrome (NAS) using the Eat, Sleep, Console (ESC) model, aligned with developmental care, trauma-informed care, and FICare principles.

The aim is to optimise infant wellbeing, reduce unnecessary pharmacological treatment, shorten hospital stay, support family integrated care and reduce infant and mother separation across all neonatal units in the East of England ODN.

2. Background

Mothers with substance use issues in pregnancy including those whose infants may develop NAS commonly have histories of trauma, violence and adversity. Trauma exposure and substance misuse is often intergenerational. Trauma histories influence parents' needs, behaviours and interactions with healthcare systems, with stigmatisation and marginalisation also common. For many fear and shame is ever present in throughout their pregnancy journey, and can be a major barrier to transparency, trust, collaboration, engagement and receiving compassionate care. Therefore, there is an additional risk of retraumatization in maternity and neonatal settings. It therefore vital to treat not only the baby, but recognise the baby and mother are a dyad, acknowledging trauma and building trust. Interventions and coordination of care should also acknowledge that the baby has emotional, developmental and psychological needs. The biopsychosocial needs of the family which can be complex should be assessed and supported through integrated MDT working.

A trauma informed approach is therefore recommended in all setting across all staff members (e.g. Marcellus 2014). This acknowledges the mother's history, avoids stigmatising language and punitive

attitudes, centres on care, dignity, compassion, respect and empathy. A Trauma informed approach helps to reduce fear, build trust and facilitate better engagement. It also promotes mother-baby connection wherever safe and possible (e.g. rooming in, skin to skin, empowering and bonding enhancing activities) recognising the importance of attachment, bonding and relational healing in addition to medical care. However, it also acknowledges there may be many barriers to this for example the impact of withdrawal, well documented psychological barriers to bonding, the ability to be present on the unit for prolonged periods etc.

Caring for a family where the baby has NAS provides a unique opportunity to support families compassionately and give them the best chance to feel equipped to care for their baby even when their stay may be short. It involves close collaboration between services and professionals to ensure that the baby and family receive joined up, seamless care.

NAS refers to a spectrum of withdrawal symptoms experienced by newborns following in-utero exposure to a range of different substances. Common signs include tremors, irritability, high muscle tone, gastrointestinal upset and disturbances in feeding and sleep^{1,2,13,19}. While NAS most commonly follows prenatal opioid exposure, symptoms can also occur after exposure to benzodiazepines, barbiturates, antipsychotics, stimulants (amphetamines, cocaine), nicotine, alcohol, antidepressants (SSRIs/SNRIs) and even high levels of caffeine^{3,12,17}.

The Finnegan Neonatal Abstinence Scoring System (FNASS), first developed in the 1970s has become the most widely adopted method for assessing NAS^{11,13}. However, multiple studies and clinical audits have demonstrated limitations:

- Subjectivity and inconsistency, even with intensive training, inter rater reliability decreases over time^{4,5,7,9,10,20,24,25,29}.
- Bias towards pharmacological treatment, as scoring thresholds are closely tied to medication initiation and weaning, despite limited validation of these thresholds^{10,18,23}.
- Increased disruption and separation due to frequent scoring and a tendency towards NICU admission for pharmacological intervention, despite NAS and pharmacological intervention being a criteria for transitional care in the BAPM Transitional Care Framework^{16,24}.
- Prolonged length of stay due to rigid medication pathways and prolonged weaning courses, meaning average admission for NAS in the UK is around 19 days^{5,22,23}.

In response, a group of physicians in North America developed the Eat, Sleep, Console (ESC) Care Tool, a simplified, function-based assessment model. ESC evaluates three core behaviours:

Eating — can the infant feed effectively?

Sleeping — can the infant sleep for at least one hour undisturbed after a feed?

Consoling — can the infant be consoled within 10 minutes?³⁰

Studies show that ESC:

- Reduces pharmacologic treatment rates (e.g. morphine use decreased from 98% to 14% after implementation)^{6,15,23,26,27,28}.
- Shortens hospital length of stay (median reduced from 22.4 to 5.9 days in early studies)^{6,15,23,26,27,28}.
- Maintains safety, with no increase in readmission rates or adverse outcomes²⁸.
- Promotes family integrated care, reducing maternal infant separation and improving parental satisfaction^{26,27,28}.

For these reasons, the East of England Neonatal Operational Delivery Network (EOE ODN) intends to adopt ESC as the preferred approach to supporting substance exposed newborns.

3. Scope

This guideline applies to:

- All infants at risk of NAS/ Neonatal Opioid Withdrawal Syndrome (NOWS)- on postnatal wards, transitional care units, in special care baby units, local neonatal units and neonatal intensive care units.
- All healthcare professionals involved in the care of substance exposed newborns- including neonatal nurses, midwives, paediatricians, neonatologists, advanced neonatal nurse practitioners (ANNPs), allied health professionals, psychological professionals, nursery nurses, and midwifery support workers.

3.1 Substances covered

ESC has been validated and is primarily intended for infants exposed to opioids, including prescribed medications, illicit opioids and opioid maintenance therapies, shown in the table below.

Category	Examples
Opioid substitution therapy	Methadone, Buprenorphine (Subutex®, Suboxone®)
Illicit opioids	Heroin
Prescription opioids	Codeine, Dihydrocodeine, Tramadol, Oxycodone (OxyContin®, Oxynorm®), Hydromorphone, Morphine, Fentanyl, Pethidine (Meperidine), Tapentadol, Methadone (also used in substitution therapy)

Infants may also show withdrawal like symptoms following exposure to benzodiazepines, barbiturates, antipsychotics, stimulants (amphetamines, cocaine), nicotine, alcohol, antidepressants (SSRIs/SNRIs) and even high levels of caffeine, in these cases ESC can still be used to guide assessment and support non-pharmacological care, however, opioid pharmacological treatment is not indicated unless there has been confirmed opioid exposure. Appendix 1 shows the likely withdrawal effects seen with these medications and the recommended in hospital observation period.

4. Assessment using the ESC Criteria³⁰

Begin ESC assessments within 4–6 hours of birth (after the first feed). Repeat assessments every 2–4 hours, aligned with feeding and routine newborn observations.

Assessments should be carried out in the newborn's own room or cot, avoiding unnecessary removal from the caregivers. Parental/caregiver input, using a Newborn Care Diary (example shown in appendix 2), must be incorporated into assessments.

4.1 Duration of monitoring:³⁰

Infants exposed to short acting opioids (e.g., oxycodone, codeine): minimum 48 hours.

Infants exposed to long-acting opioids (e.g., methadone, buprenorphine): 4–7 days.

For infants treated pharmacologically: continue ESC assessments for 24–48 hours after discontinuation of medication.

4.2 ESC Domains³⁰

Eat <i>“Does the infant have poor eating due to NAS?”</i>	Definition of “eating well”: Effective breastfeeding 8–12 times daily with good latch and transfer. Bottle feeding age appropriate volumes when showing hunger cues. Criteria for poor eating (due to NAS): Unable to coordinate feeding within 10 minutes of hunger cues, and/or Unable to sustain feeding for ≥10 minutes at breast or take ≥10 mL by bottle feed due to NAS related symptoms (e.g., irritability, tremors, uncoordinated suck). Exclusions: Do not mark “Yes” if poor feeding is attributable to non-NAS causes (e.g. prematurity, anatomical latch issues, transitional sleepiness in first 24 hours). When unclear mark “Yes” and continue close monitoring.
Sleep <i>“Did the infant sleep less than one hour after feeding due to NAS?”</i>	Normal considerations: Cluster feeding and shorter sleep periods are common in the first few days, particularly for breastfed infants. Criteria for poor sleep (due to NAS):

	Infant unable to sleep ≥ 1 hour after feeding because of withdrawal symptoms (e.g. fussiness, tremors, restlessness, increased startle). Exclusions: Do not mark “Yes” if poor sleep is explained by non-NAS causes (e.g. routine testing, nappy change etc).
Console <i>“Is the infant unable to be consoled within 10 minutes due to NAS?”</i>	Criteria: Infant remains inconsolable despite the use of Consoling Support Interventions (CSIs), such as: • Soothing voice. • Facilitating hand to mouth. • Gentle hand on abdomen. • Flexed positioning. • Skin to skin or swaddled rocking. • Non-nutritive sucking or feeding if showing cues. Consolability scale (document at each assessment): • Soothes with little support. • Soothes with some support (e.g., skin to skin, rocking, sucking). • Requires much support or does not soothe within 10 minutes. Exclusions: Do not mark “Yes” if distress is clearly caused by hunger, pain, or another non-NAS source.

4.3 Team Huddle

A team huddle should be triggered if any single “Yes” response on ESC or repeated “3s” on consolability scale. Participation should include the parent(s)/caregiver(s), allocated health professional caring for the infant (Midwife, Nurse, Nursery Nurse, Maternity Support worker etc),

allocated doctor or ANNP and extended team as appropriate e.g. Allied Health Professionals and Psychological Professionals

The team huddles purpose is to:

- Review infant's non-pharmacological care.
- Facilitate caregiver presence and capacity to support their baby
- Assess feeding quality and environment.
- Decide whether escalation to pharmacologic treatment is indicated.³⁰

Because of overlapping clinical features, signs of substance withdrawal in newborns should be carefully differentiated from other conditions with similar presentations. At each huddle, the team should consider the following differential diagnoses:

Sepsis- Temperature instability, irritability

Hypoxic-Ischemic Encephalopathy- Abnormal muscle tone, irritability, seizures

Metabolic Disturbances (e.g., hypoglycaemia, hypocalcaemia)- Jitteriness, irritability, seizures

Endocrine Disorders (e.g., hyperthyroidism)- Temperature instability, irritability, loose stools²¹

4.4 Documentation³⁰

All ESC assessments must be recorded on the ESC flowsheet (paper or electronic, seen in Appendix 1). This documentation should include:

- Parental/caregiver presence (0–4 scale).
- Which Consoling Support Interventions (CSIs) were attempted and infant response.
- Team huddle outcomes and any care plan adjustments.
- Rationale for pharmacologic initiation if required.

4.5 Use in Preterm Infants

For premature infants, the sleep and consoling items of the ESC Care Tool can still be used without modification. Given the feeding immaturity of premature infants, gestational and postnatal age-expected feeding patterns should be used as a baseline. If infant feeding ability and tolerance is significantly worse than expected for gestational age and felt due to NAS, or possibly due to NAS, indicate "Yes" for "Poor eating due to NAS."

5. Non-Pharmacological Care Interventions^{30,24}

5.1 Recommended Interventions

Caregiver Presence	• Keep mother infant together throughout admission whenever safe and feasible. • Encourage continuous caregiver involvement in assessments, consoling and feeding.
Skin to Skin and Kangaroo Care	• Initiate skin to skin immediately after delivery unless contraindicated by medical instability. • Encourage frequent skin to skin or kangaroo care during the hospital stay(see EoE guideline).
Soothing and Positioning	• Swaddle or use flexed positioning to provide comfort. • Encourage gentle rocking, holding, or use of a cuddler* if parent unavailable. • Maintain a quiet, low stimulus environment with dim lighting and minimal visitors.
Feeding Support	• Promote breastfeeding whenever safe as breastmilk may reduce severity of withdrawal • Support early and frequent feeds. In cases where latching is difficult, the hospital's infant feeding policy should be followed, and referral made to the Infant Feeding Specialist and/or Speech and Language Therapist as appropriate. Reclined breastfeeding and paced bottle feeding should be considered to optimise feeding effectiveness and reduce infant stress. Where direct breastfeeding or bottle feeding is not feasible, alternative feeding methods may be employed in consultation with the feeding team and in line with local policy, examples include finger feeding, cup feeding, spoon feeding, or the use of a supplemental nursing system. • Encourage small, frequent feeds to reduce metabolic stress and risk of weight loss.
Non-Nutritive Sucking	• Offer pacifier (with caregivers' agreement) or caregiver's finger for comfort after feeding, ensuring infant is not hungry.
Sleep Protection	• Cluster care to allow long, uninterrupted sleep periods. • Avoid waking for unnecessary observations. • Ensure assessments are performed without removing infant from caregiver's arms unless essential.

*Cuddler could be parents nominated support person, staff member, or volunteer with appropriate training

5.2 Education for Families³⁰

- Provide non-judgmental fact based information on feeding options, substance safety and care strategies (Please see ESC Family Care Guide on EoE Neonatal Networks Website).
- Coach/Mentor parents how to use CSIs in daily practice.
- Empower caregivers to lead in soothing and feeding with staff acting as facilitators.
- Adopt a strength based approach with families where resilience and coping is supported, valued and potential is identified to nurture (e.g. understanding parenting values and how to move in the direction of these)

5.3 Education for staff

Health professionals caring for infants at risk of NAS/NOWS should receive appropriate training in:

- use of the assessment and monitoring tools within this guideline
- principles of Family Integrated Care
- trauma-informed and family-centred care

Health professionals should work within their scope of practice and seek additional support where appropriate.

Further information, practical guidance and training resources are available within the appendices of this guideline.

6. Pharmacological Management³⁰

Pharmacological treatment is a last resort, initiated only when an infant continues to show significant functional impairment on ESC despite fully optimised non-pharmacological care and a team huddle has confirmed the need for escalation. The aim is to restore the infant's ability to eat, sleep, and be consoled, while minimising drug exposure and length of stay. Whenever pharmacologic treatment is initiated, it should occur alongside ongoing non-pharmacological support and caregiver presence.

6.1 First Line Treatment: Oral Morphine Drug of choice for all opiate withdrawal Mu agonist

Non-pharmacological care is always first line. Morphine oral solution, which may need to be supplied as a low concentration pharmaceutical special, should be given PRN (as needed) only when an infant clearly cannot eat, sleep, or be consoled despite optimised comfort care and after a team huddle. This aligns with Grossman's et al. (2017)³⁰ original ESC model, which reduced unnecessary morphine use and length of stay. A safety net option for short scheduled dosing may be used if repeated PRN doses are required.

Step 1 –PRN Morphine oral solution

- Indication: Infant fails ESC criteria despite full non-pharmacological support.
- Dose: 40micrograms/kg once only to be written PRN (3-4hourly)³¹.
- Reassessment: At next care interval (typically 3–4 hours).
- If infant stabilises: No further morphine is given.
- If infant continues to fail ESC: A second PRN dose may be considered.

Step 2- Escalation to scheduled dosing

- Indication for scheduled dosing: Infant requires >2 PRN doses in 24 hours or continues to fail ESC repeatedly despite PRN support⁴⁴ Increase initial dose by 20%.
- Titration: Increase initial dose by 20%/dose after a team huddle and optimised non-pharmacological care, if the infant continues to fail ESC criteria (cannot eat, sleep, console).
- Maximum: Do not exceed 200micrograms/kg 4hrly^{32,33,34,35,36,37}

Step 3 – Weaning

Once infant stable for 24–48 hours reduce total daily dose by 10–20% every 24–48 hours, guided by ESC criteria^{32,33,34,35,36,37}

Step 4- Once stopped

- Continue to observe ≥24–48 hours after last dose to ensure stability.

6.2 Second Line Treatment

If an infant remains functionally impaired on ESC despite optimised non-pharmacological care and adequate oral morphine therapy, consider adding:

	Clonidine ³⁸	Phenobarbital ^{39,40,41,42}
Drug class	Centrally acting α_2 -adrenoreceptor agonist	Barbiturate (CNS depressant)
When to use	Refractory withdrawal despite morphine Preferred if available due to shorter therapy and no sedation	Refractory withdrawal with morphine Especially considered for sedative-hypnotic withdrawal (e.g. benzodiazepines, barbiturates)
Start dose	6 mcg/kg/day orally (divided 4–6h), start with 1 mcg/kg and check BP before dose escalation	For oral use only use alcohol free oral solutions. With loading: 10–20 mg/kg then maintenance dose of 5 mg/kg per day in two divided doses given orally every 12 hours (first dose given 12 hours after the loading dose). Or without loading: 5 mg/kg per day in two divided doses given orally every 12 hours.
Increments	25% increases if symptoms persist	Adjust dose as per serum levels and symptoms
Maximum dose	12 mcg/kg/day	10–12 mg/kg/day orally
Monitoring	BP and HR: every 4–6h for 48h, then every 12h; return to every 6h during wean until 24h post stop	Therapeutic drug levels 15–40 mg/litre (60–180 micromol/litre) ⁴³ Monitor for sedation and respiratory depression
Weaning	Wean morphine first After 48h off morphine, reduce clonidine by 10% of maximum dose every 24h Stop when ≤ 1.5 mcg/kg/day	Wean morphine first Wean by 10 to 20 percent every other day and discontinued when the total daily dose is < 1 mg/kg
Advantages	Quicker wean Reduces morphine dose + length of stay No sedation or respiratory depression Shorter therapy than phenobarbital	Quicker wean when combined with morphine Reduces morphine dose + length of stay
Disadvantages	Requires frequent BP/HR monitoring May not be readily available (unlicensed special)	Risk of over-sedation Requires serum level monitoring Longer overall therapy than clonidine Potential adverse neurodevelopmental effects Outpatient follow-up required

6.3 Documentation³⁰

Document all decisions to initiate, escalate, or wean pharmacological therapy in the ESC flowsheet and medical record. This should include:

- Rationale for initiation,
- Non-pharmacological strategies attempted,

- Team huddle participants and conclusions,
- Medication dose, frequency, and weaning plan.

Pharmacy and senior neonatal medical staff must be involved in oversight of all pharmacologic treatment plans

7. Discharge

All routine discharge procedures must be followed in line with local policies. Infants with NAS should have been off medications for at least 24-48hrs with reassuring ESC assessments.

Exception to above is when home pharmacological intervention has been decided by the consultant medical team and administration competencies has been achieved by parents/foster carer before discharge. As morphine oral solution at a low concentration is a pharmaceutical special, it is recommended that the hospital maintains the prescribing and supply of this and that the GP / community pharmacist are **not** requested to prescribe or supply.

In addition, where the infant has been admitted to Transitional Care or a NICU the Neonatal Community Nursing Team will facilitate and coordinate the discharge of the babies who required treatment, in liaison with the appropriate professionals including the GP, Health Visitor, Social Worker, Midwifery Safeguarding Team, the social worker and Drug/ Alcohol Rehabilitation Team.

A discharge planning meeting should be held, where considered necessary, with parents/ family/ Foster carer (as applicable), Health Visitor, Social worker with typed copy of the minutes to be included in the clinical notes. Local services such as Drug/Alcohol Rehab Team should also be informed. This is to allow the key workers adequate time to organise, and co-ordinate post discharge substance use review and care i.e. medication, methadone / other prescribed medication (if applicable), appointment with the doctor / key worker etc.

Complete a discharge summary with details of the HV, SW for GP with copies to social worker (as applicable), health visitor and the family. Care must be taken not to include any sensitive information. For Babies going into Foster Care, a special discharge form or letter should be devised to be given to foster carers with detailed ongoing care or follow up plan.

Follow up

For infants discharged on Phenobarbital, there should be a weaning protocol aimed at stopping the medication within the first 3 months of age and careful consideration to ensure only alcohol free oral solution is given.

- Arrange Paediatric/ Neonatal Consultant follow up for all the symptomatic babies
- who required treatment
- For babies who are discharged to Foster Care, referral to 'Looked After Children's
- Medical team (part of the Community Paediatric Team) for subsequent follow up should be arranged.
- It is recommended (American Association of Paediatrics guideline) for babies

diagnosed with NAS, who required pharmacological treatment, to have neurodevelopmental assessment at 2yr (please see [EoE neurodevelopmental](#) follow up guideline and the [NICE guideline NG72](#))

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Appendix 1: Recommended In-hospital observation period

Substance	Examples	Minimum In-Hospital Observation	Rationale / Notes
Short-acting opioids ^{48,30}	Heroin, codeine, morphine, oxycodone	≥48 hours (all exposures)	Withdrawal usually appears within 2 days.
Long-acting opioids ^{48,30}	Methadone, buprenorphine	≥4–7 days (all exposures)	Onset delayed up to 4 days.
Benzodiazepines ⁵⁴	Diazepam, lorazepam, temazepam	24–48 hours if chronic use or near delivery; otherwise, routine postnatal care	Risk of withdrawal or sedation if chronic or near delivery exposure. Occasional/remote use carries little risk.
Barbiturates ^{49,50,51,52,53}	Phenobarbital, pentobarbital	≥4–5 days (all exposures, even therapeutic maternal use for epilepsy)	Very long half-life: withdrawal may not appear until day 4–5. Applies to infants of mothers on phenobarbital for epilepsy.
SSRIs SNRIs ^{44,45,46,47,55,56}	Fluoxetine, paroxetine, venlafaxine	≥24 hours if exposure in late pregnancy and pulse oximetry screening passed; otherwise, routine postnatal care (please note must have passed pulse oximetry screening to be discharged)	Poor neonatal adaptation most likely with late-pregnancy use; rare PPHN risk within 24h.
TCAs ^{44,45,46,47,55,56}	Amitriptyline, nortriptyline	≥24 hours if exposure in late pregnancy; otherwise, routine postnatal care.	Mild withdrawal/arrhythmia risk if late-pregnancy exposure. Earlier exposure less relevant.
Alcohol ⁵⁴	Ethanol	Normal postnatal care.	Neonatal withdrawal is rare and linked to heavy/chronic maternal intake.
Nicotine	Cigarettes, vaping	No additional admission beyond routine postnatal care	Symptoms mild and self-limiting; prolonged admission not required.
Stimulants ⁵⁴	Cocaine, amphetamines	≥24 hours only if maternal use close to delivery; otherwise, routine postnatal care	Acute toxicity if maternal use close to delivery (jitteriness, high tone).
Antipsychotics ⁵⁷	Olanzapine, risperidone, haloperidol, quetiapine	≥24–48 hours if chronic use near delivery; otherwise, routine postnatal care	Risk of poor neonatal adaptation, EPS, or sedation mainly with chronic/late pregnancy use.
Caffeine	Coffee, tea, energy drinks	No additional admission beyond routine postnatal care	Only very high maternal intake may cause mild transient symptoms.
Poly-substance	Any combination	Use longest relevant window of substances involved (often ≥4–7 days)	Symptoms more severe/prolonged with multiple substances; use longest observation window.

****These recommendations are subject to Local Unit Guidelines and individual clinical decision making. Some variation is expected, particularly as we take into account the DHSC 10-Year Health Plan (2025) and the ongoing shift towards community-based care. Consideration should be given to implementing mechanisms that enable families to safely monitor their infants at home, with potential open access to children's assessment services and community follow up.****

Example Postnatal Monitoring Guidance for Infants Exposed to SSRIs/SNRIs used at West Suffolk Hospital

1. If otherwise uncomplicated pregnancy SSRIs/SNRI's alone not an exclusion criteria for homebirth. To discuss at homebirth planning visit risk of PPHN as 1:2000
2. Full NEWTT2 observations should be completed on day 0 at 30 minutes, 1 hour and 2 hours of age. If no other risk factors, observations can be discontinued with safety netting advice given to parents. If no signs of withdrawal or PPHN, suitable for early discharge/remain at home
3. Ideally pre-and postductal saturations should be completed between 4-8hrs to exclude PPHN, or if homebirth prior to discharge and MUST be completed by 24hrs
4. NIPE to be performed prior to discharge from hospital and/or within 12 hours, if no symptoms of neonatal abstinence noted please do not commence NAS observations.
5. Full NEWTT2 observations to be completed on Day 1 (home or hospital)
6. If symptomatic of neonatal abstinence at any point commence NAS Obs. Transfer to unit if at home
- 7) It is not contra-indicated to breastfeed. Signpost women to BFN/BUMPS website for further information

Families are sign posted to a leaflet for monitoring babies once home.

Appendix 3: EATING, SLEEPING, CONSOLING (ESC) CARE TOOL

- Assess infant after each feed, preferably while skin to skin or held swaddled by mother/caregiver.
- Review baby's ESC behaviours since last assessment 3-4 hours ago using Newborn Care Diary with parents.
- If infant with "Yes" for any ESC item or receiving "3s" for "Soothing Support Used to Console Infant", perform team huddle with mother/parent & allocated health professional caring for the infant to determine non-pharm interventions that can be optimised further.
- If infant continues with "Yes" for any ESC item or "3s" for "Soothing Support" despite optimal non-pharm care and symptoms felt likely due to NAS, perform full team huddle with mother/parent, RN, and Infant Provider to determine if medication treatment is needed.

See back of sheet for definition of items.

TIME				
EATING				
Poor eating due to NAS? Yes / No				
SLEEPING				
Sleep < 1 hr due to NAS? Yes / No				
CONSOLING				
Unable to console within 10 min due to NAS? Yes / No				
Soothing support used to console infant:				
Soothes with little support: 1				
Soothes with some support: 2				
Soothes with much support or does not soothe in 10 min: 3				
PARENTAL / CAREGIVER PRESENCE				
Parental / caregiver presence since last assessment:				
No parent present: 0				
1 - 59 minutes: 1				
1 hr – 1 hr 59 min: 2				
2 hr – 2 hr 59 min: 3				
3 hr+: 4				
MANAGEMENT DECISION				
Recommend a Team Huddle? Yes / No				
Management decision:				
Optimise non-pharm care: 1				
Initiate medication treatment: 2				
Other (please describe):				
NON-PHARM INTERVENTIONS				
Rooming-in: Increased / Reinforced				
Parental presence: Increased / Reinforced				
Skin-to-skin contact: Increased / Reinforced				
Holding by caregiver/cuddler: Increased / Reinforced				
Swaddling: Increased / Reinforced				
Optimal feeding: Increased / Reinforced				
Non-nutritive sucking: Increased / Reinforced				
Quiet environment: Increased / Reinforced				
Limit visitors: Increased / Reinforced				
Clustering care: Increased / Reinforced				

Adapted from Grossman et al (2017) ³⁰

Appendix 4: DEFINITIONS³⁰

EATING

- Poor eating due to NAS: Baby is unable to coordinate feeding within 10 minutes of showing hunger AND/OR is unable to sustain feeding for 10 minutes at breast or bottle feeding due to NAS symptoms (e.g., fussiness, tremors, uncoordinated or excessive suck).
- Special Note: Do not indicate “Yes” for poor eating if it is clearly due to non-NAS related factors (e.g., prematurity, transitional sleepiness in the first 24 hours of life, or inability to latch due to infant / maternal anatomical factors). If it is not clear if the poor eating is due to NAS, indicate “Yes” on the flowsheet and continue to monitor the infant closely while optimising all non-pharm interventions.

SLEEPING

- Sleep < 1 hour due to NAS: Baby unable to sleep for more than a one hour stretch after feeding due to NAS symptoms (e.g., fussiness, restlessness, increased startle, tremors).
- Special Note: Do not indicate “Yes” if sleep < 1 hour is clearly due to non-NAS related factors (e.g., physiologic cluster feeding, interruptions in sleep for routine newborn testing, symptoms in first day likely due to nicotine or SSRI withdrawal). If it is not clear if sleep < 1 hour is due to NAS, indicate “Yes” on the flowsheet and continue to monitor the infant closely while optimising all non-pharm interventions.

CONSOLING

- Unable to console within 10 minutes due to NAS: Baby unable to be consoled within 10 minutes by infant caregiver effectively providing recommended Consoling Support Interventions.
- Special Note: Do not indicate “Yes” if infant’s inconsolability is due to infant hunger, difficulty feeding or other non-NAS source of discomfort. If it is not clear if the inability to console within 10 minutes is due to NAS, please indicate “Yes” and continue to monitor the infant closely while optimising all non-pharm interventions.

Consoling Support Interventions (CSIs)

- Caregiver begins softly and slowly talking to infant and uses his/her voice to calm infant.
- Caregiver looks for hand to mouth movements and facilitates by gently bringing infant’s hand to mouth.
- Caregiver continues talking to infant and places caregiver’s hand firmly but gently on infant’s abdomen.
- Caregiver continues softly talking to infant bringing baby’s arms and legs to the center of body.
- Picks up infant, holds skin to skin or swaddled in blanket, and gently rocks or sways infant.
- Offers a finger or pacifier for infant to suck, or a feeding if infant showing hunger cues.

SOOTHING SUPPORT USED TO CONSOLE INFANT

1. Soothes with little support: Consistently self-soothes or is easily soothed with one of first 4 CSIs above.
2. Soothes with some support: Soothes fairly easily with skin-to-skin contact, being held clothed or swaddled, rocking or swaying, sucking on finger or pacifier, or feeding.
3. Soothes with much support or does not soothe in 10 minutes: Has difficulty responding to all caregiver efforts to help infant stop crying OR does not soothe within 10 minutes; never self-soothes.

PARENTAL / CAREGIVER PRESENCE

- Time since last assessment that parent (or other caregiver) has spent in room with infant.

OPTIMAL FEEDING:

- Baby feeding at early feeding cues until content without any limit placed on duration or volume of feeding.
- Breastfeeding: Baby latching deeply with comfortable latch for mother and sustained active suckling for baby with only brief pauses noted. Assist directly with breastfeeding to achieve more optimal latch/position and request lactation consultation if any concerns present.
- Bottle feeding: Baby effectively coordinating suck and swallow without gagging or excessive spitting up; modify position of bottle or flow of nipple if any concerns present. Consult feeding specialist if feeding difficulties continue.

Appendix 5: EATING, SLEEPING, CONSOLING (ESC) IRR TOOL³⁰

- Assess infant after feedings, preferably while skin-to-skin or held swaddled by mother/caregiver.
- Review baby's ESC behaviours since last assessment 3-4 hours ago using Newborn Care Diary with parents.
- If infant with "Yes" for any ESC item or receiving "3s" for "Soothing Support Used to Console Infant", perform team huddle with mother/parent & RN to determine non-pharm interventions that can be optimized further.
- If infant continues with "Yes" for any ESC item or "3s" for "Soothing Support" despite optimal non-pharm care and symptoms felt likely due to NAS, perform full team huddle with mother/parent, allocated health professional caring for the infant, and Infant Provider to determine if medication treatment is needed.

DATE/TIME:	Allocated health professional caring for the infant	Eat Sleep Console Lead
EATING		
Poor eating due to NAS? Yes / No		
SLEEPING		
Sleep < 1 hr due to NAS? Yes / No		
CONSOLING		
Unable to console within 10 min due to NAS? Yes / No		
Soothing support used to console infant: Soothes with little support: 1 Soothes with some support: 2 Soothes with much support or does not soothe in 10 min: 3		
MANAGEMENT DECISION		
Recommend a Team Huddle? Yes / No		
RELIABILITY PERCENTAGE		%

Determining Inter-rater Reliability Percentage: Calculate the percent agreement between the allocated health professional and the Eat Sleep Console Lead rater on the 5 items above. For example, if 5 out of the 5 items are in agreement = 100% reliability, and if 4 out of the 5 items are in agreement = 80% reliability.

Appendix 6: Trauma Informed Care for Families Affected by Substance Use and NAS

Parents with substance use issues in pregnancy, including those whose infants may develop Neonatal Abstinence Syndrome or Neonatal Opioid Withdrawal Syndrome, frequently have significant histories of trauma, violence, loss, stigma and adversity. Trauma exposure and substance misuse commonly occur across generations, and these experiences strongly influence how a parent perceives, engages with, and responds to healthcare systems.

Many parents experience shame, fear, mistrust and self-protection throughout pregnancy and after birth. These feelings can create substantial barriers to open communication, collaboration, and emotional engagement. Parents may worry about judgement, blame, or punitive consequences, and may feel unsafe or overwhelmed in clinical environments. As a result, there is a risk of re-traumatisation within maternity and neonatal settings if care is not delivered with compassion, consistency and awareness.

For this reason, it is important to recognise the parent and baby as a dyad, whose physical and emotional wellbeing are deeply interconnected. Supporting an infant with NAS/NOWS means supporting the parent's psychological safety, emotional regulation, confidence and ability to connect with their baby. Infants also have emotional, developmental and relational needs which require sensitive, attuned caregiving in addition to medical treatment.

Families affected by substance use may have complex biopsychosocial needs, including mental health difficulties, social vulnerability, safeguarding histories, housing insecurity, domestic abuse experiences, or limited support networks. Coordinated multidisciplinary working (midwifery, neonatology, psychology, perinatal mental health, substance use services, health visiting and social care) is essential to provide joined up care.

Parents who feel safe, supported and emotionally contained are often better able to soothe and regulate their infant. Substance use, withdrawal, stress, trauma and sleep deprivation can all affect a parent's ability to remain regulated and emotionally available.

Providing simple regulation techniques may improve parental confidence and support the infant's ability to Eat, Sleep and Console.

Suggested strategies include:

- paced breathing (e.g. inhale for 4 seconds, exhale for 6 seconds)
- grounding exercises (e.g. 5-4-3-2-1 sensory grounding)
- hand-on-heart self-soothing
- supportive, non-judgemental emotional check-ins
- encouraging breaks if the parent feels overwhelmed
- offering reassurance and practical support during caregiving tasks

Signs a parent may need additional emotional support

- visible overwhelm or shutdown
- difficulty tolerating infant crying or distress
- avoidance of caregiving interaction
- heightened anxiety, irritability or agitation
- emotional numbing or detachment
- fearfulness around caregiving tasks
- inconsistent engagement related to distress, withdrawal or exhaustion

Co-Regulation Techniques

Infants with NAS/NOWS may struggle to regulate their own physiological and emotional states effectively and rely heavily on external regulation from calm, attuned caregivers.

ESC care relies on parents being supported to provide these techniques where possible and appropriate.

Helpful strategies include:

- skin-to-skin care / kangaroo care
- containment holding (gentle, flexed, secure positioning)
- low-stimulus environments (dim lighting, reduced noise, minimal handling)
- soft rhythmic vocalisation or humming
- maintaining predictable caregiving routines
- using the parent's scent to promote settling
- pacing stimulation according to the infant's cues

Supporting parental regulation may improve infant consolability, feeding and sleep regulation.

Readiness for Engagement

Parents vary widely in their readiness and emotional capacity to engage in ESC care depending on factors such as:

- emotional state
- trauma history
- withdrawal symptoms
- confidence and self-efficacy
- mental health difficulties
- understanding of infant needs
- previous experiences with healthcare or social care systems

The Transtheoretical Model (Stages of Change Model) is widely used in NHS substance use services and may help staff understand a parent's stage of engagement and readiness for support.

Stage	Possible Presentation	Helpful Staff Approach
Early disengagement / limited capacity	overwhelmed, avoidant, fearful, ambivalent	prioritise safety, trust and non-judgement
Emerging awareness	beginning to recognise infant needs and personal difficulties	validation, psychoeducation, gentle encouragement
Early engagement	participating inconsistently in care	coaching, modelling, reassurance
Active participation	increasing confidence and responsiveness	supported autonomy and positive reinforcement
Maintenance	sustaining caregiving engagement	ongoing support and relapse planning
Relapse or setback	increased distress or disengagement	compassionate re-engagement and support

Readiness should be viewed as dynamic and changeable rather than a fixed assessment of parental capability.

Trauma-Informed Communication

Many families affected by substance use have trauma histories. Trauma may reduce emotional regulation, increase threat sensitivity, and affect parent infant bonding and co-regulation.

Helpful clinical approaches include:

- offering choices whenever possible
- being predictable and clear in communication
- avoiding rushed interactions
- explaining procedures before touch or handling
- validating emotional responses
- using calm, non-judgemental language
- supporting parental rest and breaks
- acknowledging parental strengths and efforts

Examples of validating language:

- “It’s understandable to feel overwhelmed.”
- “You are getting to know your baby’s cues.”
- “We can work through this together.”

This appendix is provided for guidance and educational purposes and is intended to support trauma informed, family centred care within existing clinical roles and resources. Staff should work within their professional scope of practice and access local safeguarding, psychology, perinatal mental health or substance use services where additional support is required. Ongoing staff training and reflective support are encouraged.

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Appendix 7: Example of good practice: HOPE Boxes to support mothers and babies separated close to birth due to safeguarding concerns.



The Principles Underpinning the HOPE Boxes

The Giving HOPE offer can help ensure more compassionate care for mothers and babies separated close to birth, to minimise harm and support connection. In addition to the HOPE Boxes, Giving HOPE also offers set-up support and training to ensure the HOPE Boxes have an impact across the system and improve outcomes for both mothers and babies.



Visit <https://www.givinghope.org.uk> to get involved.

Appendix 8: National Policy and Guidance Informing Multi-Agency and Joined Up Care for Women with Substance Misuse in Pregnancy

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Free training resources

<https://learn.nes.nhs.scot/62027> (you need to register as an external user)

<https://portal.e-lfh.org.uk/Component/Details/447574>

<https://learninghub.nhs.uk/catalogue/staffhealthandwellbeing?nodeId=11330>

<https://portal.e-lfh.org.uk/Component/Details/391659>

Trauma-Informed Practice - Thrive LDN

Toolkits

<https://harmreduction.org/issues/pregnancy-and-substance-use-a-harm-reduction-toolkit/>

<https://www.perinatalharmreduction.org/free-resources>

Appendix 9- East of England Eat Sleep Console Working Group

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Jane Fenton-Smith, Neonatal Occupational Therapist | Lead Occupational Therapist, East of England Neonatal Operational Delivery Network

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Olivia King, Ward Manager, Midwife, The Princess Alexandra Hospital NHS Trust

Beth Laver, Nurse, Ipswich Hospital

Christina Massey, Quality Improvement Manager Regional Maternity Team, NHS England East of England

Srinivas Nallagonda, Consultant Neonatologist, Luton Hospital

Heather Orme, Neonatal Staff Nurse, Betsi Cadwaladr University Health Board

Carina O'Grady- Neonatal Nurse, Betsi Cadwaladr University Health Board

Prathiba Pai, Neonatal Service Lead, Paediatrics Consultant. Ipswich Hospital.

Kelly Phizacklea Family Engagement Lead/ Neonatal Service User Voice Representative for NHSE Maternity and Neonatal Programme) East of England Neonatal Operational Delivery Network.

Oliver Rackham, Neonatal Consultant, Betsi Cadwaladr University Health Board

Wendy Roger Leads Nurse for Neuroprotection, East of England Neonatal Operational Delivery Network

Katie Scripps, Practice Development Nurse, Ipswich Hospital

Kerry Shilleto, Nursery Nurse, Peterborough City Hospital.

Rachel Stamp, Neonatal Physiotherapist | Lead Physiotherapist, East of England Neonatal Operational Delivery Network

Exceptional Circumstances Form

Form to be completed in the **exceptional** circumstances that the Trust is not able to follow ODN approved guidelines.

Details of person completing the form:	
Title:	Organisation:
First name:	Email contact address:
Surname:	Telephone contact number:
Title of document to be excepted from:	
Rationale why Trust is unable to adhere to the document:	
Signature of speciality Clinical Lead:	Signature of Trust Nursing / Medical Director:
Date:	Date:
Hard Copy Received by ODN (date and sign):	Date acknowledgement receipt sent out:

Please email form to: kelly.hart5@nhs.net requesting receipt.

Send hard signed copy to:

Kelly Hart
 EOE ODN Office Manager
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 Rosie Hospital
 Robinson Way
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 Hills Road
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