SWEDISH

Care of the Substance Use Exposed Newborn: Eat, Sleep, Console (ESC) Method

Clinical Area: Postpartum couplets
Population Covered: Perinatal, Neonatal, Pediatrics

Related Procedures, Protocols, and Job Aids:

Abuse and Neglect: Protective Hold for Infants and Children
Abuse and Neglect Identification and Reporting: Child
Barcoded Medication Administration (BCMA)
Bottle Feeding
Breastfeeding the Term Infant
Car Seat Angle Tolerance Testing: Neonatal
Care of the Term Newborn
Care of the Late Preterm Infant
Cleaning of Specialty Bottles & Nipples
Fall Prevention and Safety: Pediatric and Neonatal

Purpose

To provide clinical guidelines for the management of the neonatal patient impacted by maternal/ prenatal opioid use.

LIP Order Requirement

Elements of this protocol require a licensed independent practitioner's (LIP) order.

Responsible Persons

Registered nurse (RN), LIP, pharmacist, lactation consultant (IBCLC), case management social worker (MSW), Pediatric Therapy, Addiction Recovery Services (ARS) medical team to provide care for the birthing parent and newborn couplet.

Policy

The first line of treatment Neonatal Opioid Withdrawal Syndrome (NOWS), previously known as Neonatal Abstinence Syndrome (NAS), in this family-centered model is non-pharmacologic support and care, ideally provided by the parent and family while rooming in a single patient room as clinically appropriate. The intent of this care model is to provide optimal support and to keep the couplet together (birthing parent and newborn(s)).

Swedish Medical Center chooses neonatal **oral morphine solution** (0.4 mg/ml) as the first-line pharmacologic agent for treatment for NOWS, when medication is needed. Swedish Medical Center chooses **clonidine** (1.5 mcg/kg/dose every 6 hours) as the recommended adjunct pharmacologic agent.

Neonatal oral morphine solution is checked using the barcode medication administration process by scanning both the patient identification (ID) band and the medication. Morphine dose preparation and waste are witnessed by a second nurse and the waste is discarded into the narcotic waste bin in the medication room on each floor/unit. (see *Barcoded Medication Administration (BCMA)*)

Newborns exposed to opioids in-utero will be monitored for NOWS using the Eat, Sleep, Console (ESC) model of care and will be transferred to FH Pediatrics, ISS Level II NICU, or EDM Level II NICU upon discharge of the birthing parent or if higher level of care is needed (such as prematurity, hypoglycemia, or respiratory distress).

General Couplet Care Guidelines

1. Parents/family are the primary caregivers in collaboration with the medical providers.
2. ESC is a **family-centered model of care** focusing on comfort measures for the newborn exposed to in-utero opioids. ESC evaluates how well the newborn can perform the activities of daily living (ADL), even when experiencing symptoms of withdrawal. Newborn functions are evaluated by assessing the following:
    a. Eat –effectively breastfeeding or eating an age-appropriate volume
    b. Sleep –sleeping undisturbed more than one hour between feeds
    c. Console – ability to be consoled in less than 10 minutes

    The key components of family centered care are as follows:

    1. Room in with the newborn:
        a. Parent/family will be the primary caregivers of the newborn during the hospital stay
        b. Parent/family are the best person(s) for soothing and calming the newborn. Parents and families will receive education on these techniques. Additionally, families will be encouraged to reference the information in The Period of PURPLE Crying (application or DVD) and additional educational materials provided to them for soothing and consoling.
    2. Provide a quiet/calm environment for the newborn. Excessive noise can elicit overstimulation:
        a. Minimal stimulation environment: low light, quiet room, decreased activity in the room, clustered

care (no disruption when sleeping) (See *Safe Sleep Guide* in Attachments section).

b. Minimal/reduced noise: phones in silent mode, tv and music at very low volume or caregivers use headphones when listening.

c. Limit people in the room (visitors).

3. Calm interactions supporting attachment:
    a. Skin to skin holding
    b. Swaddling
    c. Bathing
    d. Immediate intervention when crying
    e. Use of pacifiers

3. General newborn care follows *Care of the Term Newborn* or *Care of the Late Preterm Infant* and the order set in the electronic medical record (EMR).
4. Assess parent for fall risk/newborn drop risk due to drowsiness related to changing pharmacodynamics of their postpartum therapy, or other factors related to labor and delivery. See *Fall Prevention: Adult* or *Fall Prevention and Safety: Pediatric and Neonatal*:
    a. Avoid co-bedding/sleeping (includes bed, chair, or couch) as this has an increased risk of newborn drops and suffocation and is unsafe.
    b. When a caregiver is sleepy or drowsy, place newborn on their back in the crib.
    c. Place bed in lowest position.
    d. Keep the floor in the room clutter free.
    e. Use a nightlight.
5. Review signs and symptoms of neonatal opioid withdrawal with parent/family and remind them to notify their nurse if symptoms develop. Provide parent/family with the *ESC: Parent Program Guide,* see Attachments section.
6. Morphine is a narcotic analgesic used in the treatment of NOWS. Possible, yet uncommon, side effects are:
    a. Respiratory depression
    b. Gastrointestinal disturbances (vomiting, ileus, delayed gastric emptying, cramps, and constipation)
    c. Hypotension
    d. Urinary retention
7. Newborns receiving pharmacologic treatment for withdrawal symptoms may remain with the birthing parent but are placed on an oxygen saturation monitor for 4 hours following a dose of morphine and oxygen saturation is **documented every hour** during that time. If clonidine is administered, monitor the newborn's blood pressure **once a shift** (no limb restrictions). Morphine or clonidine administration does not necessitate separation or newborn transfer unless a higher level of care is warranted. Monitor limits are as follows: (see *Vital Signs: Pediatric*)
    a. Saturation limits 92-100
    b. Blood pressure: less than 70/50

8. Newborn discharge before 96 hours/4 days is highly discouraged. Newborns exposed to long-acting opioids such as methadone and buprenorphine can exhibit withdrawal symptoms up to 96 hours/4 days of life or later. Newborn discharge will be based on their progress and need for pharmacologic treatment. Newborns should be monitored for at least 24 hours after their last morphine dose prior to discharge.
9. If not already involved in the care, consult the Addiction Recovery Services (ARS) team.

Protocol

► *Requires LIP order*	
Responsible Person	**Steps**
L&D RN, LIP, MSW	**NEWBORN TOXICOLOGY SCREENING** 1. Test newborn for meconium and urine toxicology screens if their birthing parent has any active or recent substance use (within the last 12 months). This can be done with LIP order and does not require parental permission. It is important to obtain the first void and first meconium stool for testing whenever possible, as these are the most accurate specimens. a. If indicated, inform the birthing parent about the planned toxicology testing, purpose of the test, and how results will guide care. **NOTE:** If the birthing parent refuses testing, birthing parent is not performed, however, the newborn may still be tested per LIP order to direct care and management if maternal or newborn risk indicators are present. b. ►Perform newborn toxicology test(s) per LIP order and notify LIP with results. c. Refer all newborn and/or birthing parent risk indicators or positive toxicology results to Social Work Services. Clinical social worker will be the contact with Child Protective Services (CPS). Refer to *Abuse and Neglect Identification and Reporting: Child* d. Refer to the specific toxicology guidelines outlined below and in Substance Use in the Obstetrical Patient. e. Give and review *ESC: Parent Program Guide* (see Attachments section) with birthing parent/family.
RN, IBCLC, Pediatric Therapy, ARS representative, MSW, CM	**COUPLET CARE STRUCTURE** 1. The couplet will room in together in the same postpartum room until birthing parent is discharged, using the 5-Day COMPASSION (**C**ommunity **O**f **M**aternal and **PA**renting **S**upport for **S**ubstance **I**mpacted W**O**men and **N**ewborns) model. (see COMPASSION Care)

	2. After delivery, the LIP orders the Neonatal Withdrawal Syndrome order set, which includes the orders below: a. Select the ESC assessment. b. Vital signs per protocol *Care of the Term Newborn* policy c. Lactation/breastfeeding consult d. Pediatric Therapy consult **(OT Eval and Treat)** e. Place "Inpatient consult to Social Work" as indicated (LIP to indicate reason for consult, such as current drug use, historical drug use, etc.) f. *Perineal Skin Care / Diaper Dermatitis Management Guideline*, choose petrolatum (Aquaphor). (see Attachments section) **Additional Orders include:** g. Obtain urine toxicology screen from the birthing parent, and urine and meconium toxicology screen from the newborn. h. Breastfeed ad lib demand if breastfeeding criteria are met (criteria based on toxicology screen results are listed below in the ***Feeding and Breastfeeding Guidelines*** section) i. Formula supplementation as needed per feeding recommendations below j. Skin-to-skin care as frequently as possible 3. Morning patient-centered rounds with multidisciplinary team to include the newborn and maternal providers is encouraged whenever possible. 4. Newborn discharge will be coordinated between the infant care team, Case Management Social Worker, and other relevant care teams.
RN	**INITIATION OF EAT, SLEEP, CONSOLE IN POSTPARTUM** 1. Ensure newborn toxicology screens have been sent (criteria for breastfeeding based on toxicology screen results are listed below in the ***Feeding and Breastfeeding Guidelines*** section) 2. Discuss post-partum care guidelines with birthing parent and, if present, support person. 3. Start the ESC assessment within 4 hours of birth: a. Assess after feeding and every 2-4 hours. See below for scoring criteria and feeding guidelines. Waking the

	newborn to score is strongly discouraged. 4. ESC assessments can be discontinued if the infant has not required pharmacologic treatment of withdrawal after 96 hours of life.
RN	**PARENT EDUCATION FOR ESC NEWBORN CARE** 1. Review ESC scoring method with birthing parent and other primary caregivers and explain symptoms they may observe in the newborn. Provide the family with the following (see Attachments section): a. *Newborn Care Diary* b. *ESC Door Sign* c. Eat, Sleep, Console Overview d. *ESC: Parent Program Guide* e. *Safe Sleep Guideline* f. The Period of PURPLE Crying application or DVD
RN, LIP, Pediatric Therapy, Dietary	**NON-PHARMACOLGICAL INTERVENTIONS - SUPPORTIVE CARE** Encourage breastfeeding. Infants who are breast fed or receive mother's milk are less likely to have severe Neonatal Opioid Withdrawal Syndrome (NOWS). Review non-pharmacologic interventions with the birthing parent/family as they are the first-line treatment. Include the following: 1. Feeding term newborns: a. Ad-lib or frequent feeds - breastmilk or formula (see *Breastfeeding the Term Infant*, or *Bottle Feeding*) b. Consider fortification to 22 cal/oz if not gaining adequate weight (see *Supplementation for the Breastfed Term Infant*) c. If breastfeeding, monitor weight gain and assess need for caloric supplementation. d. Consider use of pre-digested formula to ease abdominal discomfort (Similac Total Comfort). e. Lactation support during stay f. Use Dr. Brown preemie or level 1 nipple for bottle feeding (preemie nipple is ideal for supporting breastfeeding) (see *Cleaning of Specialty Bottles and Nipples*)

	NOTE: For newborns who require additional feeding support, use age-appropriate protocols and follow LIP/ Pediatric Therapy/Dietary recommendations. 2. Quiet and low stimulation environment: a. Limit environmental stimulation (auditory and visual), especially during feeds and bonding times b. Dark room or dim lighting (use nightlight to prevent falls) c. Reduce noise: silence phones, television or music at low volume or with headphones d. Limit visitors (in-person and virtual) e. Quiet white noise in the room but away from newborn to prevent hearing damage f. Clustered care, coordinated interventions and assessments 3. Comfort: a. Swaddle the newborn snugly with ability for the hips to be mobile. Some babies may prefer their hands are available for sucking b. Non-nutritive sucking with pacifier c. Skin-to-skin holding d. Gentle swaying or vertical rocking e. Quiet soft whispered talking 4. Skin integrity: a. Apply petroleum jelly liberally with each diaper change prophylactically until meconium has passed. b. Then use zinc oxide ointment liberally after meconium stools. c. Follow guidance in *Skin Care*/*Diaper Dermatitis Guidelines* if any skin breakdown is observed in the diaper area. (see Attachments section)
RN	**ASSESSMENT PARAMETERS** **EAT** **NOTE**: Withdrawal is physiologically stressful. Newborns who experience symptoms of withdrawal often need increased calories to maintain or gain weight.

Eat assessment question: Yes or No?

- Baby is unable to coordinate feeding within 10 minutes of showing hunger cues, and is unable to sustain feeding for at least 10 minutes at breast and/or take at least 1 ounce by bottle (or other age-appropriate duration/volume) due to withdrawal symptoms.
  Scoring is performed after feeds.

NOTE: Do not include a Yes answer if the poor eating is due to non-opioid related factors (examples: prematurity, transitional sleepiness during first 24 hours, inability to latch due to anatomical factors).

SLEEP

Sleep assessment question: Yes or No?

- Baby is unable to sleep for at least one hour when left undisturbed after feeding due to opioid withdrawal symptoms.

NOTE: Do not include a Yes answer if the lack of sleep is due to non-opioid related factors (examples: first 24 hours of nicotine or SSRI withdrawal, interruptions due to routine newborn testing).

CONSOLE

Console assessment question: Yes or No?

- Baby is unable to console within 10 minutes due to opioid withdrawal symptoms, despite infant caregiver/provider effectively providing optimum ESC environment and non-pharmacologic interventions.

NOTE: Do not indicate a Yes answer if the newborn's inconsolability is due to non-opioid related factors (examples: parent/caregiver non-responsiveness to newborn fussiness, circumcision pain,).

ASSESSMENT AND HUDDLE

1. If the newborn has one "Yes" answer to the Eat, Sleep, Console questions, the bedside RN will huddle with the parent or caregiver and discuss ways to optimize non-pharmacologic interventions.
2. If the newborn has two or three "Yes" answers to the Eat, Sleep, Console questions, the bedside RN will request a huddle with provider, parent/family, and charge RN to discuss treatment options. The care team can contact the LIP at any time if there are concerns. The care huddle can

	be in-person or virtual. It is important to ensure all non-pharmacologic interventions have been maximized before requesting a huddle with a provider. 3. Document scores in the appropriate flowsheet (NB, NICU, Pediatrics, or Critical Care Peds PCS Body System) under "Eat, Sleep, Console" in the EMR. If the ESC flowsheet needs to be added, from the unit specific PSC Body System flowsheet, go to Neuro/Cogn/Behav channel, click Additional Documentation, scroll down and find the ESC group and add.
RN, Lactation Consultant, ARS, LIP	**FEEDING AND BREASTFEEDING GUIDELINES** ***Breastfeeding Guidelines for Birthing Parents with suspected or confirmed Substance Use Disorder (SUD):*** 1. ► Review birthing parent urine toxicology screen prior to breastfeeding. 2. Obtain meconium and urine toxicology screen for newborns who are born to birthing parents with a positive toxicology screen (unless only positive for marijuana) or known recent (within the last 12 months) or active substance use. 3. Provide information about breastfeeding guidelines and treatment expectations to emphasize importance of couplet interaction, birthing parent's bonding and active involvement in the newborn's care. Discuss policy/guidelines outlined below: a. **NEGATIVE URINE TOXICOLOGY SCREEN:** i. Encourage breastfeeding ii. Offer Lactation consult b. **POSITIVE URINE TOXICOLOGY SCREEN**: (a screen is considered positive if it shows use of any substances not currently prescribed to the birthing parent): i. positive for marijuana only - encourage breastfeeding but counsel to avoid marijuana use during the period of lactation and breastfeeding (see *Marijuana During Pregnancy and Breastfeeding* in Attachments section.) ii. continue daily urine toxicology screening until a negative result is obtained if the parent wishes to breastfeed iii. Breastfeeding can begin once the birthing parent has one negative toxicology result

iv. Offer Lactation consult.

v. **Birthing parents who wish to breastfeed and have a positive toxicology screen (other than marijuana) are encouraged to work on establishing milk supply and to pump and discard until able to breastfeed**.

4. For additional information on contraindications to breastfeeding please refer to *Breastfeeding the Term Infant*.

Formula Feeding & Supplementation Guidelines

1. Due to increased caloric needs in this population, newborns experiencing NOWS may benefit from increased caloric density. For term newborns who are receiving formula or expressed breast milk **and not gaining adequate weight**, consider fortifying feeds to 22kcal/oz or higher as dictated by newborn weight gain and feeding.

   NOTE: Consider 26 cal/oz for premature newborns once tolerating full feeds. Discuss with LIP.

2. Breastfeeding infants who are showing appropriate weight gain do not need additional fortification or supplementation.
3. Consider formula for sensitive stomach (Similac Total Comfort)
4. Feeding ad lib or per LIP orders.

Supplementation and Exclusive Formula Feeding Recommendations (35 weeks and older):

	• Supplement (to offer after breastfeeding) • Use expressed breastmilk if available and if none, use formula	**Exclusive Formula** • Consider increased kcal/oz
Day 1	5-10 mL	10-20 mL q3h
Day 2	10-20 mL	20-35 mL q3h
Day 3	20-30 mL	35-45 mL q3h
Day 4	At least 30 mL q3-4 hours	45-55 mL q3h
Day 5	As above	45-60 mL q3h
Day 6 and beyond	As above	As above

RN, LIP, Pharmacist	**PHARMACOLOGIC TREATMENT GUIDELINES**
	► 1. The initial dose of oral morphine is 0.04 mg/kg and is ordered by the LIP.
	► 2. Inform the newborn provider when the newborn has two or three "Yes" answers to the questions asked at each assessment. Request a huddle with provider, parent/family, bedside RN, and charge RN to discuss treatment options. (see *ESC Pharmacologic Treatment Algorithm* in Attachments section). Consider giving a PRN morphine dose when the Care Huddle has occurred, and all non-pharmacologic interventions have already been optimized.
	► 3. The standard **concentration** of oral morphine is 0.4 mg/ml. **A standard (0.4 mg/ml) pre-filled syringe of oral morphine is dispensed from Pharmacy and stocked in the Pyxis. The ordered patient dose determines the correct volume of medication. The ordered dose may require wasting; therefore, a second RN is required to check the dose ordered in the MAR, witness the waste, and co-sign for the waste in Pyxis. Waste is disposed in the appropriate receptacle.**
	4. Place newborn on continuous oxygen saturation monitor for 4 hours after morphine dose. Document oxygen saturations every hour while being monitored.
	5. Continue assessing newborn every 2-4 hours when the newborn is awake after initial morphine dose.
	6. A huddle is necessary with the birthing family, RN and LIP before each dose of PRN morphine is considered, unless the LIP has provided different orders.
	MORPHINE ESCALATION AND WEANING 1. If the newborn requires morphine at 3 consecutive assessments and is unable to meet ESC goals despite maximal non-pharmacologic interventions, the LIP may consider moving to scheduled Q3 hour dosing after a huddle has occurred and non-NOWS causes have been excluded. If scores are improving or infant is likely to be at the peak of withdrawal symptoms, consider continuing morphine on a PRN-only basis. 2. For newborns who continue to not meet ESC goals, the LIP may increase morphine dose by 0.02mg/kg/dose up to every 6 hours as needed. 3. Consider a secondary agent (e.g., clonidine) if:

	a. "yes" answers to ESC assessment due to NOWS/NAS symptoms b. non-pharmacologic cares have been optimized, AND c. morphine dose is maximized at 0.14 mg/kg/dose OR newborn is unable to wean by day 7 of treatment. **NOTE:** Clonidine may be effective especially in situations of polysubstance use in birthing parent. If clonidine is administered, **monitor the newborn's blood pressure every shift (every 12 hours)** while receiving the medication. There are no limb restrictions for blood pressure monitoring. 4. If the newborn is stable on current morphine dose for 24 hours, consider weaning. Wean the initial dose by 10%. If stable for 24 hours, wean by 10% of maximum dose up to every 8 hours as tolerated. 5. Discontinue morphine when the dose is less than or equal to 0.02mg/kg/dose. 6. If the newborn is being treated with both morphine and clonidine, wean morphine first. Once the newborn is stable off of morphine for 24 hours, wean clonidine by 50% and maintain new dose for 24 hours. If the baby remains stable, wean clonidine by another 50% and maintain new dose for 24 hours, then discontinue. 7. Consider discharge at least 24 hours after last morphine dose (and 24 hours after second clonidine wean, if using) if newborn remains stable and meeting ESC goals. **NOTE:** If at any time the LIP is not comfortable with the newborn's clinical presentation or response to the initial dose of morphine, it is the responsibility of the provider to initiate transfer to higher level of care.
RN	**REPORTABLE CONDITIONS** Report the following to the LIP: • Withdrawal symptoms uncontrolled by current medication orders (newborn not able to eat, sleep, or be consoled) • Projectile vomiting • Moderate to severe tremors • Possible over-sedation (sleepiness, lethargy, unresponsiveness) • Temperature greater than 37.9°C • Oxygen saturation less than 92% • Blood pressure less than 70/50

	• Report **IMMEDIATELY**: ◦ Respiratory or CNS depression ◦ Seizure activity ◦ Call a Neonatal or Pediatric Code Blue if needed
RN, MSW	**DOCUMENTATION** 1. Document in the EMR: ◦ Newborn withdrawal symptoms ◦ Newborn vital signs every 8 hours if not receiving morphine, or every 4 hours if newborn is receiving morphine with oxygen saturation documented every hour for 4 hours after each morphine dose. If newborn is receiving clonidine, assess and document BP every shift. ◦ Feeds in the *Intake and Output flowsheet* ◦ ESC scores in the appropriate flowsheet (NB, NICU, Pediatrics, or Critical Care Peds PCS Body System) under "Eat, Sleep, Console" in the EMR. ◦ Morphine or clonidine given on the Medication Administration Record using *BCMA*. ◦ Parent education in the Conditions/Medications sections of the Patient Education Activity ◦ Maternal fall risk on the Post-Delivery Fall Risk Assessment in the EMR ◦ MSW will document CPS involvement. They will be the contact for CPS. ◦ *Safe Sleep* adherence, see Attachments section. ◦ Soothing and consoling techniques (Reference The Period of PURPLE Crying) ◦ Document assessments and parent/caregiver interactions in a progress note.
RN, MSW	**NEWBORN DISCHARGE (Newborn items to be completed prior to discharge)** 1. Review symptoms of neonatal withdrawal with family and remind them to call their nurse if symptoms develop. Provide family with *ESC: Parent Program Guide*. (see Attachments section) 2. Confirm with MSW to whose care the newborn will discharge. 3. Opioid-exposed infants who do not require morphine may be discharged from the hospital after at least 96 hours/4

	days of observation. 4. Opioid-exposed infants who have received oral morphine therapy may be discharged: a. after 24 hours of observation from last morphine dose AND at least 96 hours/4 days, and b. at least 24 hours after second clonidine wean, if used 5. Family must be educated about and demonstrate "*safe sleep*" practices prior to discharge. (see Attachments section) 6. The Period of PURPLE Crying – family will be provided with information on topic. Encourage family and supporting persons to review content on soothing and consoling techniques within this education program. 7. Infant CPR training is encouraged. 8. Confirm that parent/guardian has a car seat for discharge. 9. Perform *car seat angle tolerance* testing if either: a. Newborn less than 37 weeks gestation at birth, or b. Less than 2500 grams at birth 10. Ensure *congenital heart disease screening (CCHD)*, *hearing screening*, bilirubin screening, and state newborn screen have been completed and documented in EMR. 11. ►Ensure a follow-up visit with provider is scheduled for 24-72 hours following discharge.

CAUTION:

- Parents/Guardians must sign acknowledgment if no car seat is available or if it is inappropriate for use.See *Acknowledgment of Car Seat Recommendations* in Attachments section.

SMC staff does not install a child safety seat into a vehicle. This is the parent's/guardian's responsibility.

Definitions

None.

Supplemental Information

Table 1

Defined symptoms observed in the infant experiencing withdrawal

CNS	Autonomic	Gastrointestinal
• Increased wakefulness • Excessive high pitch cry	• Diaphoresis • Nasal stuffiness/flaring	• Vomiting • Regurgitation

• Tremors • Hyperactive Moro reflex • Myoclonic jerks • Increased muscle tone • Hyperactive reflexes • Seizures • Irritability • Skin excoriation	• Temperature instability • Mottling • Tachypnea/retractions • Frequent yawning • Sweating • Repetitive sneezing	• Diarrhea ◦ Loose stools ◦ Watery stools • Poor weight gain • Poor feeding • Uncoordinated and excessive sucking

Care of these newborns involves assessment and management of symptoms until withdrawal is complete.

Most newborns who withdraw from heroin or other short half-life narcotics (Dilaudid, Fentanyl, Oxycodone, Percocet, Demerol) are symptomatic within 24-48 hours of birth. Newborns withdrawing from methadone or buprenorphine usually exhibit symptoms within 96 hours/4 days.

Common neonatal disorders such as hypoglycemia, hypocalcemia, sepsis, or meningitis may mimic or compound neonatal abstinence syndrome. It is important to evaluate these diagnoses and not assume the symptoms are due to withdrawal.

Addenda

See Attachments section:

- Acknowledgment of Car Seat Recommendations
- Bottle (Formula) Feeding Insert
- Formula Acknowledgement Form
- Marijuana Use in Pregnancy and Breastfeeding
- Perineal Skin Care / Diaper Dermatitis Management Guideline for Neonates and Diapered Children
- Period of PURPLE Crying
- Pharmacologic Treatment Algorithm
- Safe Sleep Handouts
- Door sign
- Eat SleepConsole: Parent Program Guide
- Newborn Care Diary

Regulatory Requirement

RCW 46.61.687 Child passenger restraint required-Conditions-Exceptions-Penalty for violation-Dismissal-Noncompliance not negligence-Immunity

WAC 246-101-202 – Special diseases-Sexually transmitted diseases-Duties and authorities.

WAC 246-650-020 – Performance of screening tests.

RCW 70.83.090 Critical congenital heart disease screening

References

(See Johns Hopkins Nursing Evidence Based Practice (JHNEBP) Evidence Rating Scales.)

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Attachments

- Eat Sleep Console Program: Guide for Parents
- Newborn Care Diary
- Newborn Door Sign
- NAS Scoring Tips
- Pharmacologic Treatment: Eat Sleep Console Pharmacologic Pathway for Newborn Withdrawal

Eat, Sleep, and Console

Congratulations! This Medical Center appreciates the opportunity to support you during your birthing and parenting experience. We will do everything we can to help you and your little one with the healthiest start possible.

Caring for any newborn can be challenging. All babies eat, sleep, and need some kind of consoling throughout the day and night. In-utero exposure to opioids may increase the chance for newborns to develop **Neonatal Opioid Withdrawal Syndrome (NOWS).** Infants born with exposure to opioids could exhibit increased symptoms associated with NOWS if mother-infant bonding is interrupted. Our care team hopes to support you and your baby with a family-centered approach that focuses on the comfort of your baby and optimizes nurturing, bonding and compassionate caring for the birthing parent-baby couplet.

What does Eat, Sleep, Console (ESC) mean?

Babies with NOWS can show symptoms of withdrawal, but may be able to **eat**, **sleep**, and be **consoled** like any other baby would. The Eat, Sleep, Console method looks at:

- **E**ating: Your baby is able to feed ordinarily for their age.
- **S**leeping: Your baby can sleep for at least one undisturbed hour.
- **C**onsoling (being soothed): Your baby can be soothed within 15 minutes.

ESC Before Birth

What to expect before you deliver:

Your health and pregnancy matter and this medical center strives to provide compassionate and evidence-based care to support your needs! The days and weeks before the birth of a baby can be exciting and stressful. This information is intended to answer some of your questions and help you feel more prepared. Also, we encourage you to discuss with your health care provider any questions and concerns.

To prepare for your new baby:

- You are the main caregiver who can show us how to support you and your baby's health. An openness to discussing symptoms, concerns or medication needs will help us to offer optimal care.
- Help us understand how to best follow the plan developed by you and your health care provider.

- For the health and safety of your baby, continue to take any medications prescribed by your health care provider.

It is normal to be emotional during pregnancy. It helps to have a network of friends, family, and trained counselors who can support you during this time.

If you are using illegal substances that could be harmful to your health, we encourage you to reach out for help; please contact your physician

ESC in the Hospital

Screening for NOWS:

We will watch your baby closely after birth for at least 4 days in the hospital.

There are several potential symptoms of NOWS, our main focus will be these three:

- Is your baby able to eat without any difficulties?
- Is your baby able to sleep at least one hour without difficulty?
- Is your baby able to be calmed within 10 to 15 minutes?

NOWS symptoms can occur within 24 hours to 5 days after birth and can last up to a few weeks. The length of potential withdrawal depends on baby's metabolism and on what substances the baby was exposed to. It is important to tell your baby's health care provider about **all** of the medications and/or substances your baby was exposed to during pregnancy.

Screening your newborn

We will screen for substances in your baby's system. Most babies at risk of NOWS will have their urine, first bowel movements (called meconium), and/or umbilical cord sent to the lab for testing. While you are in the hospital, the health care team will help you understand the signs of withdrawal and how to care for your baby. A social worker will meet with you during your hospital stay to provide support and to help develop a safe plan for you, your baby, and your family.

The Eat, Sleep, Console Method

Together with your nurses and doctor, you will help determine how well your baby is eating, sleeping, and how easily they can be consoled. The nurses will collaborate with you every 2-4 hours to look at your baby's overall health and will develop a plan of care designed specifically for your baby. You will be provided a Newborn Care Diary to help you keep track of how

frequently your baby is eating, how long your baby sleeps, and how easily they can be consoled.

You are the best treatment for your baby and your participation in this is very important. We appreciate your loving care!

Eating

- **Feed your baby when showing signs of hunger.** It is important to feed your baby often, at least 8-12 times a day in a quiet, calm place with little noise and few interruptions. If you bottle feed, use the same type of bottle and nipple for all feedings. Always hold your baby while feeding.
- **If your baby has problems with spitting up**, feed your baby more often and in smaller amounts. Be aware of your baby's cues, such as searching for or pulling away from the nipple or needing to pause during feeding to swallow or burp. It may be helpful to give your baby a rest during and after feedings.
- **Try for small, frequent feedings**. Schedule a follow-up appointment for a weight check. Some babies require higher-calorie feedings for weeks or months to improve their weight gain. Talk with your baby's health care provider about their nutritional needs.

Breastfeeding/Chestfeeding (Nursing your Baby)

Your love and bonding presence allow baby to grow! You can help by feeding your baby whenever they show signs of hunger (licking lips, opening the mouth, and hand-to-mouth movements). We appreciate the relationship between trauma and how the physical contact of bringing your baby to your breast/chest can be uncomfortable; we have strategies to support you if needed. Nursing is beneficial for your baby, it is your choice and our providers/lactation experts are available to help.

Substances and some medications can pass into human milk and can cause risks for baby. Preventing and ceasing alcohol, tobacco and illicit substances in the postpartum period is essential for your baby's well-being. It is safe for you to nurse if you receive Methadone or buprenorphine (Subutex/Suboxone) for the treatment of opioid use disorder regardless of the dose of medication you take. In fact, nursing can reduce the chance of NOWS, withdrawal severity, digestive issues and helps with soothing your baby. The closeness of nursing offers a baby comfort and reassurance.

Eat, Sleep, and Console

Sleeping

During the first 1-6 weeks of life, a baby usually sleeps 16 to 20 hours a day. Falling asleep and staying asleep is important for your baby. Help your baby set a sleep routine by providing a sleeping place that is consistently safe and quiet.

To establish a routine:

- Reduce noise and bright lights
- Pat or touch your baby slow and gently when it is time to sleep
- Play soft, gentle music
- Gently rock or sway with your baby while humming or singing
- Swaddle your baby; place them on their back in a quiet, safe place, such as a crib or bassinet

Consoling

After your child is born, they will stay with you in your room for rest and recovery. Having your baby close to you has been shown to help babies who show symptoms of withdrawal. We encourage you to cuddle, provide skin-to-skin time, feed and care for your baby in a calm environment. If your baby needs prolonged inpatient care to treat NOWS, you may be transferred into the Pediatric Specialty Unit.

You can help your baby through withdrawal by staying nearby. Spend as much time as possible with your baby. Gently hold them close to your body. This will also help you respond quickly to your baby's needs, such as hunger.

Babies experiencing NOWS are very sensitive to the sounds, lights, and activity around them. Many parents find that gently holding their babies close to their bodies soothes the babies. We encourage you to try skin-to-skin care or "kangaroo care" with your baby as much as possible. Not only will this help calm your baby, but it will help regulate temperature and heart rate, and it will help you bond with your baby.

Calming a fussy baby

Babies communicate by crying. It is important to respond to your baby's cries. Here are some things you can do when your baby cries:

- Check your baby's physical needs. Are they hungry? Do they need a diaper change?
- Swaddle the newborn snugly with ability for the hips to be mobile. Some babies may prefer their hands are available for sucking.
- Non-nutritive sucking with pacifier.
- Skin-to-skin holding.
- Gentle swaying or vertical rocking.

- Reduce stimulation by turning down the lights and sounds.
- Quiet soft whispered talking.
- Ask a friend or family member for help.
- Never shake a baby.

If your baby won't be consoled and the crying becomes stressful, it is ok to take a short break. Before you do, follow the steps above and make sure your baby's physical needs have been met. Call your nurse if you are feeling overwhelmed. When you are at home, you may lay your crying baby on his or her back in a crib or bassinet (a safe, secure place) while you step into another room for a few minutes (no more than 10 to 15 minutes).

Medication and Treatment

If your baby is having difficulty eating, sleeping, and is difficult to console due to withdrawal symptoms, they may need medication to help them through withdrawal. Together, you and your care team will decide if medication is needed to ease the symptoms. If your baby is able to eat, sleep, and be consoled easily, they will likely not need medication.

Treatment with medication for opioid use disorder (Methadone or buprenorphine/Subutex/Suboxone) is the standard of care, has minimal impact on baby and supports your recovery.

Our providers and addiction professionals are available to help with discussing evidence-based treatment decisions and to support your autonomy, individual and gender identity values.

ESC: Going Home

Your baby's health care provider will discuss with you when it is safe to go home. Your baby is ready to go home when they:

- Feed easily and have consistently gained weight
- Are able to maintain a stable heart rate, breathing rate, and temperature;
- Are able to eat, sleep and be consoled easily by you;
- Have a referral for community support, if appropriate;
- Have a primary care provider and a scheduled follow-up appointment; and
  Have completed all the newborn screens and vaccinations (hearing screen, bilirubin test, critical congenital heart disease test, newborn blood screening, and hepatitis B vaccine).

Adjusting to a new environment

Help your baby become comfortable in a new environment by keeping the room quiet and the lights low. Limit the number of visitors. A routine is important in helping your baby adjust to their surroundings.

Introducing new stimuli

Introduce new stimuli (things that stimulate your baby's senses and create alertness) to your baby one at a time when they are calm and awake. Watch your baby's cues and allow a timeout if needed. A timeout is a quiet time without stimulation. Your baby's ability to handle new stimuli may vary each day. As your baby's calm periods increase, you can unswaddle them for short periods of time. This will allow your baby to become used to their own body. Re-swaddle if you see signs of distress.

If your baby becomes excited, use a soft, thin blanket to wrap them snugly. Swaddle and carry your baby and talk or sing in a soothing voice.

Call your baby's health care provider anytime you feel something is not right. You know your baby better than anyone else does. Trust your instincts.

Dear Parents,

Welcome to our unit!

Your baby is here to be cared for due to Neonatal Abstinence Syndrome (also called NAS or withdrawal) NAS refers to symptoms that babies can have if their mother used methadone or other opiates during pregnancy. After birth, your baby no longer gets the drug(s) or medication (s) they were used to getting from your blood during pregnancy and your baby may develop symptoms called withdrawal.

Your love and care is very important to your baby during the withdrawal process. You have a very important role on the health care team and can help by comforting your baby. The nurses will help you learn how to feed, care for, and use comfort measures that can reduce the symptoms of withdrawal. Our goal is to keep your baby as comfortable as possible and you can help by letting us know what you see or are concerned about.

Not all babies go through withdrawal in the same way and each baby may have different symptoms. It is very hard to predict which babies will have withdrawal, how long it will last, or how long they will need to stay in the hospital. They may need to stay for a few days or several weeks depending on the treatment they need. You can help by watching for some common symptoms:

Common symptoms of withdrawal

- Trembling or shaking even when sleeping
- Loose or watery stools that can cause diaper rash
- Feeding poorly, weak suck, spitting up
- Need for comfort by sucking on pacifier or fists
- Sensitivity to light and sound
- Sneezing a lot
- A stuffy nose
- Sweating
- Fussy
- Trouble sleeping
- Crying a lot
- Yawning a lot

Scoring and medication/treatment

Every 3-4 hours, when your baby is awake, the nurse caring for your baby will give your baby a number or score based on the withdrawal symptoms seen. The more symptoms your baby has, the higher the score will be. A score of 8 or more is considered significant and when there are 3 consecutive scores that total 24, oral morphine will be started. We will watch your baby very carefully and if we think they are uncomfortable, we may need to add another medication that will help control the symptoms. The dose of morphine may be increased as needed (usually several times over a two-to-three day period) until the symptoms of withdrawal start to improve.

Once your baby has reached a stable dose where he/she seems comfortable and is showing fewer symptoms, the providers will begin to lower the dose of morphine. This weaning process can take several days to several weeks.

Comfort measures are a very important part of your baby's care and you can help in many ways. You may want to try different comfort measures to find out what helps your baby the most. Some comfort measures that you may try include:

Common comfort measures

- Provide a quiet and calm environment and keep the lights low or dim
- Keep visitors to a minimum
- Use a gentle soft voice. Your baby will love the smell of your skin and the sound of your soft voice
- Let your baby sleep and only wake him or her for feedings
- Touch and move your baby gently and slowly
- Hold and cuddle your baby skin-to-skin
- Gently rub or pat your baby's back
- Let your baby suck on a pacifier
- Hold your baby with his/her arms close to their chest. Sometime they like to suck on their fingers for comfort
- Bundle or swaddle your baby when you are not holding them
- Hold your baby upright and rock up and down with smooth, slow movements
- Avoid using too many blankets that may make them too warm when they are sleeping
- Breastfeeding can be very comforting for your baby. If possible, we encourage you to breastfeed after having a conversation with your baby's care provider.

Please talk to your care team: nurses, nurse practitioners, social workers, lactation consultants, pediatric therapists, or doctors caring for your baby if you have any questions.

Sincerely,

Pharmacologic Treatment

- The need for morphine is not considered a failure of Eat, Sleep, Console and may be indicated for some newborns
- Oral **morphine** solution (0.4 mg/ml) is the principal pharmacologic agent for newborns experiencing withdrawal symptoms after maximizing non-pharmacologic interventions
- **Clonidine** (1.5 mcg/kg/dose) is the adjunct pharmacologic treatment if an infant reaches high doses of morphine and is not meeting ESC goals
- ***Use birthweight for all medication dosing***

TEAM HUDDLE PURPOSE

- Determine ways to optimize non-pharmacologic comfort measures
- Discuss need to start or increase pharmacologic treatment

One "Yes" answer
Team huddle with the birthing parent, support person (if present) and beside nurse

Two or Three "Yes" answers
Team huddle with the birthing parent, support person (if present), beside nurse, charge nurse and LIP
NOTE: Ensure maximal non-pharmacologic interventions in use prior to notifying LIP

Initiation	• After team huddle despite maximal non-pharmacological interventions and non NAS/NOWS causes are excluded • Morphine 0.04 mg/kg/dose Q3h **PRN** (use birthweight for dose) • O2 saturation monitoring x 4 hours after dose
Scheduled dose	• **CONSIDER SCHEDULED DOSING**: If baby has required morphine at 3 assessment intervals and is not meeting ESC goals • SCHEDULED DOSING: remains at starting dose of 0.04 MG/KG/DOSE but change to **Q3h**
Escalation	• Increase dose by 0.02 mg/kg/dose no more frequently than Q6h based on determination made during team huddle
Clonidine	• Consider clonidine if dose of morphine is 0.14mg/kg/dose **OR** infant is unable to wean by day 7 of pharmacologic treatment • Start at 1.5 mcg/kg/dose Q6h • Monitor blood pressure (BP) every shift during clonidine administration • May consider clonidine use especially if polysubstance use in birthing parent
Weaning	• If using morphine and clonidine – **wean morphine first (wean morphine only if on scheduled doses)** • Begin wean when infant is stable on same dose of morphine for 24 hours • Initial wean by 10% of maximum morphine • Subsequent weans by 10% of maximum morphine dose up to every 8 hours as tolerated • Once infant is stable off morphine for 24 hours, begin clonidine wean • Wean clonidine by 50% 24 hours after last morphine and maintain for 24 hours • Wean clonidine by 50% again and maintain for 24 hours
Discontinue	• D/C morphine when dose is ≤ 0.02mg/kg/dose • D/C clonidine 24 hours after second clonidine wean
Discharge	• Monitor for at least 24 hours after last morphine dose

Newborn Care Diary

Baby's Name:_____

Date:_____

Time of breastfeeding (start to finish)	Bottle feeding (total # mLs)	Time baby fell asleep	Time baby woke up	Did baby feed well? (If no, please describe)	Did baby sleep for an hour or more? (If no, please describe)	Did baby console in 10minutes? (If no, please describe)	Check box for pee	Check box for poop	Extra Comments and descriptions/ Symptoms observed/Care Provided
Example: 12:15-12:40pm		**Example:** 10:05am	**Example:** 12:10pm	**Example:** No. Fussy during feeding.	**Example:** Yes	**Example:** Woke hungry, hard to console until able to latch	√	√ **Example:** Watery, yellow	**Example:** Sneezing, stuffy nose, jittery, spitting up, skin irritation.
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FAMILY IS RESTING
Please help families by:
Using quiet voices
Allowing time for sleep
Limiting visitors