

## Non-Pharmacological Interventions

Rooming In	<ul style="list-style-type: none"> <li>– Rooming in with parent throughout the entire hospital stay</li> <li>– Families who have a baby with NAS need to receive education on what to expect</li> <li>** Rooming in has been associated with decrease in NAS treatment and fewer days in the hospital</li> </ul>
Parental Presence	<ul style="list-style-type: none"> <li>– Ensuring parental presence at the bedside as often as possible</li> <li>– Involving parents/caregivers in the assessment of NAS symptoms and optimizing non-pharmacological interventions</li> <li>– Parents need to have the expectation set that they are the primary caregiver for their baby. Parents need to be providing care for their baby</li> </ul>
Skin to Skin Contact	<ul style="list-style-type: none"> <li>– Encouraging skin to skin contact</li> <li>– Skin to skin contact helps infants with NAS achieve state organization. They can make smooth transitions from one state to another (sleeping to awake)</li> <li>– Skin to skin contact reduces agitation and enhances comfort</li> <li>– Skin to skin contact is associated with decreased hormonal signs of stress</li> <li>– Skin to skin contact helps to buffer the environmental stimuli</li> </ul>
Holding by a caregiver or cuddler	<ul style="list-style-type: none"> <li>– Encouraging holding, gentle rocking or swaying by a caregiver or cuddler</li> <li>– If parents are not present, a caregiver or a cuddler should hold/comfort baby</li> </ul>
Swaddling	<ul style="list-style-type: none"> <li>– Swaddling or flexed positioning</li> <li>– Swaddling provides support in helping the newborn to control their bodies and allows them to focus on breathing and feeding with greater comfort</li> </ul>
Optimal Feeding	<ul style="list-style-type: none"> <li>– Withdrawal may adversely affect sucking; therefore, babies may suck frantically or have disorganized suck making it difficult for them to take in enough formula or to breastfeed</li> <li>– Keep baby swaddled during feeding, frequent burping</li> <li>– Small and frequent feedings with high calorie formula/breastmilk helps to compensate for excessive caloric expenditure</li> <li>– AAP states it is okay for women who are in drug treatment program to breastfeed if there are no contraindications, regardless of the dose             <ul style="list-style-type: none"> <li>– Small amounts of the drug is transferred, this may help decrease signs of withdrawal</li> <li>– Breastfed infants are less likely to require pharmacological interventions</li> </ul> </li> </ul>
Non-nutritive sucking	<ul style="list-style-type: none"> <li>– Non-nutritive sucking on a finger or pacifier, ensuring baby is well-fed first</li> <li>– Pacifiers are especially useful because rhythmic, non-nutritive sucking behavior has a soothing and state-organizing effect</li> <li>– Non-nutritive sucking helps to modulate and decrease the infant's uncoordinated movements and distress</li> <li>– Infants with NAS may display head thrashing or excessive rooting when the pacifier is close to mouth; therefore, helping the infant stabilize their head and facilitate ability to latch on to pacifier may be needed</li> </ul>
Quiet environment	<ul style="list-style-type: none"> <li>– Ensuring a quiet environment with low light and stimulation in room</li> <li>– Keep lights low</li> </ul>

	<ul style="list-style-type: none"> <li>– Offer calm surroundings</li> <li>– Infants with NAS have a low tolerance to stimuli and need protection from overstimulation but should not be stimulus-deprived</li> <li>– Minimizing loud noise, voices should be low volume</li> </ul>
Limiting Visitors	<ul style="list-style-type: none"> <li>– Limiting visitors to one at a time and only to those that will be quiet and supportive</li> <li>– Routine is beneficial</li> <li>– Caregivers should have a calm presence</li> </ul>
Clustering care	<ul style="list-style-type: none"> <li>– Providing uninterrupted periods of sleep, clustering infant's care</li> <li>– Follow the infant's cues; the baby may need to be fed before changing the diaper</li> </ul>
Other Interventions:	<ul style="list-style-type: none"> <li>– Current studies are focusing on the benefits of incorporating the use of essential oils, aroma therapy and acupressure to help to manage NAS</li> <li>– The prone position, along with flexed legs, increases sense of control and ability to relax. Introduce back to sleep, as recommended by AAP, as infant shows less signs of withdrawal and begins to transition to home. Prone positioning led to decrease in severity of NAS. If back to sleep protocol not followed for medical reasons, infant should be monitored</li> <li>– Vertical rocking is a slow rhythmic swaying following line from head to toe while swaddled and is found to be comforting-soothes neurological system. Keep movement slow and rhythmic and maintain the infant in a flexed/swaddled position</li> </ul>
Avoid Unnecessary Stimulation	<ul style="list-style-type: none"> <li>–Tactile <ul style="list-style-type: none"> <li>• Use gentle, firm touch, stroking or massage to hands/feet</li> </ul> </li> <li>–Auditory <ul style="list-style-type: none"> <li>• Avoid toys with lights and sounds, no nearby extraneous auditory stimulation</li> <li>• Expose infants to rhythmic sounds, slow and steady (ex. white/brown noise machine)</li> </ul> </li> <li>–Movement <ul style="list-style-type: none"> <li>• Slow, fluent movements when picking up and placing down</li> <li>• Range of motion exercises while changing diapers</li> </ul> </li> <li>–Visual <ul style="list-style-type: none"> <li>• Use indirect lighting or low watt bulbs</li> <li>• Shield eyes when turning on light or position facing away from light</li> </ul> </li> <li>–Taste and Smell <ul style="list-style-type: none"> <li>• Feed in calm environment</li> <li>• Avoid noxious smells and tastes from products</li> </ul> </li> </ul> <p><b>***Provide scent blanket from mother when she is not there</b></p>