

Non-Pharmacologic Care Definitions

First-line treatment for infants at risk for NAS is non-pharmacologic care with engagement of the mother as the primary caretaker. (1) Proper use of non-pharmacologic care as first-line treatment has been shown to reduce the need for pharmacologic management by 30-50%. (2-6) Essentials of non-pharmacologic care include:

- Rooming-in model of care: *This can include rooming-in on a postpartum ward, private room NICU, or pediatric inpatient ward.*
- Skin-to-skin contact
- Infant holding / gentle rocking / swaying
- Breastfeeding promotion for eligible mothers
- Clustering of infant care / allowing for uninterrupted periods of sleep
- Swaddling
- Pacifiers
- Decreasing environmental stimuli to noise and light
- Feeding on demand
- Engagement of the mother as the primary caregiver of her infant, with active participation and presence at the bedside throughout the hospitalization

References:

1. Hudak ML, Tan RC. Committee on Drugs; Committee on Fetus and Newborn; American Academy of Pediatrics. Neonatal drug withdrawal. *Pediatrics*, 2012; 129(2): e540-60. PMID:22291123; DOI: 10.1542/peds.2011-3212
2. Bagley SM, Wachman EM, Holland E, et al. Review of the assessment and management of neonatal abstinence syndrome. *Addict Sci Clin Pract*, 2014; 9(1): 19. PMID: 25199822; PMCID: PMC4166410; DOI: 10.1186/1940-0640-9-19
3. Holmes AV, Atwood EC, Whalen B, et al., Rooming-In to Treat NAS: Improved Family-Centered Care at Lower Cost. *Pediatrics*, 2016; 137(6). PMID: 27194629; DOI: 10.1542/peds.2015-2929
4. Hunseler C, Bruckle M, Roth B, et al. Neonatal opiate withdrawal and rooming-in: a retrospective analysis of a single center experience. *Klin Pediatr*, 2013; 225:247-51. PMID: 23966227; DOI: 10.1055/s-0033-1347190
5. Abrahams RR, Kelley SA, Payne S, et al. Rooming-in compared with standard care for newborns of mothers using methadone or heroin. *Can Fam Physicians*, 2007; 53(10): 1722-1730. PMID: 17934036; PMCID: PMC2231437
6. Howard MB, Schiff DM, Penwill N, et al. Impact of Parental Presence at Infants' Bedside on NAS. *Hosp Pediatr*, 2017, Jan 30. Epub ahead of print. PMID: 29137920.