

NAS/NOWS Standardized Protocol

Available resources	
	Neonatal care support, including nutrition
	Developmental support
	Pharmacological support
Identification of infants at risk from maternal exposure	
	Information from obstetric provider(s)
	History of opioid use disorder/substance use disorder and/or treatment
	Screening questionnaires (e.g., 4Ps)
	Maternal biological testing results
	PDMP
Non-pharmacological management strategies: Begin with risk factors or symptoms.	
	Eat Sleep Console (ESC)
	Breastfeeding/breast milk
	Rooming in
	McKnight S, Coo H, Davies G, Holmes B, Newman A, Newton L, et al. Rooming-in for Infants at Risk of Neonatal Abstinence Syndrome. Am J Perinatol. 2015 Nov 20;
Assessment of symptoms: Consider options for assuring inter-rater reliability.	
	Finnegan
	Lipsitz
	WAT-1
Pharmacological strategies (Required: Guidelines for initiation, adjusting dose, and weaning)	
	Morphine
	Finnegan score: ≥ 8 x3; ≥ 12 x2
	Initiation
	8-10, 0.04 mg/kg/dose q3h
	11-13, 0.06 mg/kg/dose q3h
	14-16, 0.08 mg/kg/dose q3h
	≥ 17 , 0.10 mg/kg/dose q3h
	Adjusting dose
	Goal: control symptoms with 24-48 hours
	9-10, increase by 0.02 mg/kg/dose q3h
	>10, increase by 0.04 mg/kg/dose q3h
	Maximum dose 0.2 mg/kg/dose q3h
	Decreasing the dose if overshooting the mark
	Weaning
	After withdrawal controlled for ≥ 24 -48 hours
	Wean by 10% of max dose q48 hrs
	Can wean daily if stable and <9, but consider weaning by 5%
	In 24 hr period, if 3 scores >8-10, or 2 scores >12, consider increasing dose back to last stable dose and holding at that dose x24-48 hours

		When total dose is < 0.025 mg/kg/dose q3h, consider weaning q 24 hrs
	Clonidine	
	Initiation	
		Consider clonidine if morphine >0.1 mg/kg/dose, or if significant insomnia or diarrhea (0.5-2.0 mcg/kg q6h).
	Weaning	
		Wean clonidine over 2-3 d after morphine discontinued
	Phenobarbital	
	Initiation	
		Consider phenobarbital with poly-drug exposure (5mg/kg/day).
	Weaning	
		Discontinue phenobarbital after other meds discontinued.
	Methadone	
		Brown MS, Hayes MJ, Thornton LM. Methadone versus morphine for treatment of neonatal abstinence syndrome: A prospective randomized clinical trial. J Perinatol. 2015 Apr;35(4):278–83.
	Buprenorphine	
		Hall ES, Rice WR, Folger AT, Wexelblatt SL. Comparison of Neonatal Abstinence Syndrome Treatment with Sublingual Buprenorphine versus Conventional Opioids. Am J Perinatol. 2017 Nov 7;
		Kraft WK, Adeniyi-Jones SC, Chervoneva I, Greenspan JS, Abatemarco D, Kaltenbach K, et al. Buprenorphine for the Treatment of the Neonatal Abstinence Syndrome. N Engl J Med. 2017 May 4;
	Discharge	
	Feedings	
	Medications	
	Information (NAS and resources)	
	Follow-up	
	Pediatric care	
	Developmental follow-up	
	Therapy(ies)	

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