

CPAP in the Delivery Room and the Late Preterm and Full-Term Newborn.

The use of CPAP on the late preterm and the full-term newborn in the delivery room is controversial. During normal transition, the distribution of fluid through the lung is not homogenous. The timing of fluid movement from the alveoli to the interstitium is also not consistent. This creates dynamic and unpredictable compliance of the term lung, increasing the risk of pneumothorax. Normally transitioning term newborns can present with transient labored breathing, tachypnea, and grunting that do not require CPAP. Consider CPAP for term newborn demonstrating signs of moderate to severe respiratory distress.

The modified ACoRN Respiratory Score could help guide the decision. Consider CPAP with 5 cmH₂O pressure for babies with a heart rate greater than 100 bpm and showing signs of moderate respiratory distress.

ACoRN Respiratory Score			
Score	0	1	2
Respiratory rate/min	40 – 60	60 – 80	>80
Retractions	None	Intercostal or subcostal (or both)	Intercostal, subcostal and sternal
Grunting	None	With stimulation	Continuous at rest
Oxygen requirements	None	≤ 30%	>30%
Breath sounds on auscultation	Easily heard throughout	Decreased	Barely heard
Prematurity	>34 weeks	30 – 34 weeks	<30 weeks
		Respiratory score	/12

Boulton, J., Coughlin, K., O'Flaherty, D., & Solimano, A. (2021). *ACoRN: Acute Care of at-Risk Newborns* (2nd ed., p. 56). Oxford University Press.

	ACoRN Respiratory Score
Mild Respiratory Distress	< 5
Moderate Respiratory Distress	5 - 8
Severe Respiratory Distress	>12

Claassen, C., & Strand, M. (2019). Understanding the Risks and Benefits of Delivery Room CPAP for Term Infants. *Pediatrics*, 144(3), e20191720. <https://doi.org/10.1542/peds.2019-1720>.

Smithhart, W., Wyckoff, M., Kapadia, V., Jaleel, M., Kakkilaya, V., & Brown, L. et al. (2019). Delivery Room Continuous Positive Airway Pressure and Pneumothorax. *Pediatrics*, 144(3), e20190756. <https://doi.org/10.1542/peds.2019-0756>