

## RESUSCITATION Supporting information

**This guideline has been prepared with reference to the following:**

Wylliea J, Bruinenberg J, Roehr C et al. European Resuscitation Council Guidelines for Resuscitation 2015 Section 7. Resuscitation and support of transition of babies at birth. *Resuscitation*. 2015;95:249-63

<https://cprguidelines.eu/>

Kattwinkel J, Perlman JM, Aziz K, et al. Neonatal resuscitation: 2010 American Heart Association guidelines for cardiopulmonary resuscitation and emergency cardiovascular care. *Pediatrics* 2010;126: e1400-13

<http://pediatrics.aappublications.org/content/126/5/e1400.full>

Resuscitation Council (UK). Newborn life support. 2010

Anon. Ethical guidelines on resuscitation of newborns: FIGO Committee for the Ethical Aspects of Human Reproduction and Women's Health. *Int J Gynecol Obstet* 2006;94:169-71

<http://www.glowm.com/pdf/English%20Ethical%20Issues%20in%20Obstetrics%20and%20Gynecology.pdf> (see page 114)

### **Naloxone should not be administered to infants whose mothers abuse narcotics?**

A single case study (Gibbs, 1989) recorded generalised convulsions unresponsive to diazepam in a naloxone-treated baby born to a heroin user maintained throughout her pregnancy on methadone. The authors concluded that, as convulsions due to neonatal abstinence syndrome do not appear until at least 48 hours after birth, the symptoms in this case were due to naloxone administration. A 2018 systematic review found that the existing evidence from randomised controlled trials is insufficient to determine whether naloxone confers any important benefits to newborn infants with cardiorespiratory or neurological depression that may be due to intrauterine exposure to opioid (Moe-Byrne, 2018). The authors concluded that given concerns about the safety of naloxone in this context, it may be appropriate to limit its use to randomised controlled trials that aim to resolve these uncertainties.

Gibbs J, Newson T, Williams J, et al. Naloxone hazard in infant of opioid abuser. *Lancet*. 1989;2:159–60

Moe-Byrne T, Brown JVE, McGuire W. Naloxone for opioid-exposed newborn infants. *Cochrane Database Syst Rev*. 2018 Oct 12;10:CD003483  
<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD003483.pub3/full>

**Evidence Level: V**

### **Should resuscitation be carried out with 21% or 100% oxygen?**

A 2019 systematic review of five RCTs and 5 quasi RCTs included 2164 patients found that 21% oxygen (room air) was associated with a statistically significant benefit in short-term mortality compared with 100% oxygen (7 RCTs; n = 1469; risk ratio [RR] = 0.73; 95% confidence interval [CI]: 0.57 to 0.94). No significant differences were observed in neurodevelopmental impairment (2 RCTs; n = 360; RR = 1.41; 95% CI: 0.77 to 2.60) or hypoxic-ischemic encephalopathy (5 RCTs; n = 1315; RR = 0.89; 95% CI: 0.68 to 1.18).

Welsford M Nishiyama C, Shortt C et al. Room Air for Initiating Term Newborn Resuscitation: A Systematic Review With Meta-analysis. *Pediatrics*. 2019;143. pii: e20181825

**Evidence Level: I**

**Last amended October 2019  
Last reviewed December 2021**

Not found an answer to your question? Wish to suggest an edit to this document?  
Please contact the BCGP Clinical Effectiveness Librarian at [bedsideclinicalguidelines@uhnm.nhs.uk](mailto:bedsideclinicalguidelines@uhnm.nhs.uk)