

**EVIDENCE BASED NEONATAL RESUSCITATION****P. Davis***The Royal Women 's Hospital, Melbourne, VIC, Australia*

For the past 50 years, the practice of neonatal resuscitation has been based largely on expert opinion and evidence from animal models. The 2010 International Liaison Committee on Resuscitation (ILCOR) guidelines contain recommendations derived from an accumulating body of higher quality evidence. This presentation will summarise some of the studies underpinning changes to the guidelines. Changes include:

- Colour is no longer recommended as a sign of oxygenation. Pulse oximetry is recommended for infants receiving respiratory support
- PEEP is beneficial for preterm infants receiving positive pressure ventilation
- Both CPAP and ventilation via an endotracheal tube are reasonable methods of respiratory support for preterm infants

Mask ventilation remains the cornerstone of neonatal resuscitation. Clinical signs, including chest wall movement poorly measure the effectiveness of ventilation. Mask leak and airway obstruction are common, often unrecognized factors that lead to ineffective ventilation. Respiratory function monitoring is a potentially useful way of improving treatment in the delivery room. The strengths and limitations of novel monitoring techniques will be discussed.

Evidence emerging since publication of the 2010 guidelines will be presented and the most important gaps in our knowledge outlined.