6). Evidence supports the resuscitation of asphyxiated newborns with 21% oxygen rather than 100% oxygen; preliminary studies reduced mortality and neurologic morbidities in newborns resuscitated with 21% oxygen (Chalkias, Xanthos, Syggelou, et al, 2013; Saugstad, 2010). Proponents for room air resuscitation suggest that fewer complications are associated with oxidative stress and hyperoxemia when room air is administered (Vento and Saugstad, 2011). The 2010 American Heart Association Neonatal Resuscitation Guidelines recommend the initiation of neonatal resuscitation using room air (no supplemental oxygen); if the neonate does not improve within 90 seconds, the use of supplemental oxygen is recommended (see Evidence-Based Practice box). Pulse oximetry is recommended to monitor the infant's oxygenation status during resuscitation and to prevent excessive use of oxygen in both term and preterm infants (Kattwinkel, Perlman, Aziz, et al, 2010).

Translating Evidence into Practice

Use of Room Air or Low Oxygen for Newborn Stabilization and Resuscitation in the Delivery Room

Updated by Deb Fraser

Ask the Question

PICOT Question

Is room air or low oxygen better for newborn stabilization and resuscitation in the delivery room?

Search for Evidence

Search Strategies

Search selection included English publications on room air or low oxygen use for newborn stabilization and resuscitation in delivery room in past 3 years.

Database Used

PubMed

Critically Analyze the Evidence