In keeping with the March of Dimes Nursing Program’s commitment to provide nurses with up-to-date information to enhance their care of mothers and babies, we recently asked the authors of *The Premature Infant: Nursing Assessment and Management, 2nd Edition* to review the entire module. They concluded that, as a whole, the publication is current but, as detailed below, several recent clinical guidelines have altered best practices in selected areas. Please review this update carefully.

**Updates for *The Premature Infant: Nursing Assessment and Management, 2nd Edition***

Lyn E. Vargo, PhD, RN, NNP-BC  
Carol Wiltgen Trotter, PhD, RN, NNP-BC

Since publication in 2007 of *The Premature Infant: Nursing Assessment and Management, 2nd Edition*, new guidelines on management of premature infants in the delivery room and prevention of perinatal group B streptococcus disease have been issued. Additionally, new content is available for ultrasound screening of premature infants at risk for intraventricular hemorrhage. The reader is referred to the references identified below for the most up-to-date material.

**Delivery Room Resuscitation**

The American Academy of Pediatrics (AAP) and the American Heart Association (AHA) (AHA & AAP, 2010) have published new guidelines for delivery room resuscitation that offer more specific management strategies to ensure prevention of some prematurity-related complications in the critical period following the first few minutes after birth. Problems that arise during this period are associated with the immature systems of the premature infant as noted in Table 2 of the module.

New guidelines include:

- Using immediate oxygen saturation monitoring of the infant to prevent potential issues related to hyperoxia and hypoxemia;
- Careful, gradual titration of oxygen keeping saturations between 85 to 95%;
- Special considerations for assisting ventilation using continuous positive airway pressure (CPAP) via a mask with a flow–inflating bag or T-piece resuscitator;
- Management of positive pressure ventilation using the lowest inflation pressure needed;
- Use of PEEP with a range of 2-5 cm H₂O when the infant is intubated;
- Avoidance of a head down position and rapid infusions of fluid volume to decrease the risk of neurologic injury.
In 2010, a special report titled “Neonatal Resuscitation: the 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care” was released and can be accessed at:  
http://pediatrics.aappublications.org/content/126/5/e1400.full.pdf. Readers are encouraged to read this important document. To achieve a fuller review and understanding of current recommendations, readers are directed to the 6th edition of the Neonatal Resuscitation Textbook (2010) published by the American Heart Association (AHA) and the American Academy of Pediatrics (AAP). This important publication, with its accompanying DVD, would be a valuable resource in every neonatal intensive care unit (NICU).

**Prevention of Perinatal Group B Streptococcus Disease**

In 2010, the Centers for Disease Control and Prevention published revised guidelines for prevention of perinatal group B streptococcal (GBS) disease (Verani, McGee & Schrag, 2010). The new guidelines present a revised algorithm for management of newborns at risk for early onset GBS disease and updated algorithms for prenatal GBS screening and intrapartum prophylaxis. These guidelines may be accessed at:  
http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5910a1.htm?s_cid=rr5910a1_w

**Intraventricular Hemorrhage**

While the intraventricular hemorrhage (IVH) grading system described by Papille in 2002 and described on page 89 of the module is still used widely, recommendations have been updated to more effectively reflect ultrasound changes associated with all degrees of severity of IVH. A discussion of the new grading system as well as recommendations for optimal timing of ultrasound screening for premature infants at risk for IVH is presented by deVries (2010, p. 940) and Volpe (2008, p. 541). Readers are directed to these two important resources to enrich their appreciation of changing recommendations.

**References**


