

<p>if untreated</p> <p>Multifactorial etiology: Preterm birth is major risk factor</p>		<p>from a neurobehavioral developmental perspective.</p> <p>Use supplemental oxygen judiciously and monitor oxygen blood levels carefully; prevent wide fluctuations in oxygen blood levels (hyperoxemia and hypoxemia).</p> <p>Arrest vascular proliferation process—laser photocoagulation; surgical repair of detached retina.</p> <p>Recently, there has been increased interest in the administration of an antivascular endothelial growth factor drug bevacizumab, which arrests the proliferation of vessels and prevents retinal detachment commonly seen in retinopathy of prematurity. If successful, this therapy may preclude the use of laser therapy (<a href="#">Hartnett, 2014</a>).</p>	<p>saturation alarms, and preventing fluctuations in blood oxygen levels.</p> <p>Provide postoperative pain management if surgery is performed.</p> <p>Provide parental education and support.</p> <p>Provide nursing care using principles of individualized developmental care.</p>
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*CPAP*, Continuous positive airway pressure; *ECMO*, extracorporeal membrane oxygenation; *INO*, inhaled nitric oxide; *IV*, intravenous; *RDS*, respiratory distress syndrome.

**Inhaled nitric oxide (INO) and extracorporeal membrane oxygenation (ECMO)** are additional therapies used in the treatment of respiratory distress and respiratory failure in neonates. INO is used in term and late preterm infants with conditions such as persistent pulmonary hypertension, meconium aspiration syndrome (see [Table 8-6](#)), pneumonia, sepsis, and congenital diaphragmatic hernia to decrease or reverse pulmonary hypertension, pulmonary vasoconstriction, acidosis, and hypoxemia. Nitric oxide is a colorless, highly diffusible gas that can be administered through the ventilator circuit blended with oxygen. INO therapy may be used in conjunction with surfactant replacement therapy, high-frequency ventilation, or ECMO. Although INO is used in preterm infants with respiratory distress and respiratory failure, its use has not proved to be significantly