

Hyperbilirubinemia for Pediatric ED

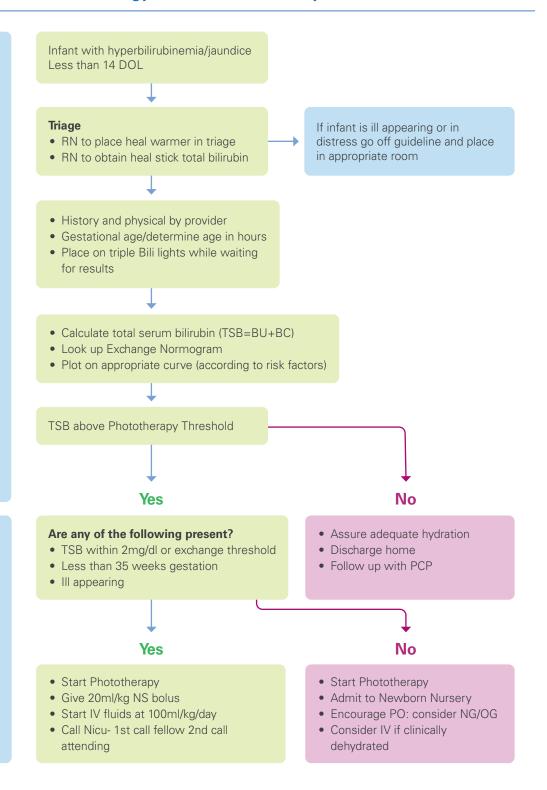
Pediatric Emergency Medicine, Neonatalogy, and Pediatric Nursery

Risk Factors for Developing Significant Hyperbilirubinemia

- Gestational age < 40 weeks Jaundice in 1st 24 hrs after birth
- Discharge TSB or TcB close to the Phototherapy Threshold
- Hemolysis from any cause, or rapid rate of increase of TSB or TcB:> 0.3 mg/dL per hour in the 1st 24 hrs or > 0.2 mg/ dL per hour thereafter
- Phototherapy before discharge from the birth hospital
- Parent, sibling requiring phototherapy or exchange transfusion
- Family history, genetic ancestry suggest inherited RBC disorder including G6PD deficiency
- Exclusive breastfeeding with suboptimal intake
- Down syndrome
- Macrosomic infant of diabetic mother

Hyperbilirubinemia Neurotoxicity Risk Factors

- Isoimmune hemolytic disease
- Other hemolytic diseases, e.g., G6PD Deficiency
- Significant clinical instability in the previous 24 hours: e.g., sepsis, acidosis, asphyxia, significant lethargy, temperature instability
- Albumin < 3.0 g/dL





Hyperbilirubinemia Guideline

Executive Summary

Children's Hospital of Richmond ED Hyperbilirubinemia Workgroup

Pediatric ED Owner: Judy Barto, MD, Pediatric Nursery: Tiffany Kimbrough, MD, Neonatology:

Approved (January 2023)

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References:

Guidelines Reviewed:

Kemper, Alex R., et al. "Clinical practice guideline revision: management of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation." Pediatrics 150.3 (2022).

Bhutani VK, Johnson LH, Jeffrey Maisels M, Newman TB, Phibbs C, Stark AR, Yeargin-Allsopp M. Kernicterus: epidemiological strategies for its prevention through systems-based approaches. J Perinatol. 2004 Oct;24(10):650-62. doi: 10.1038/sj.jp.7211152. PMID: 15254556.

Kuzniewicz MW, Wickremasinghe AC, Wu YW, McCulloch CE, Walsh EM, Wi S, Newman TB. Incidence, etiology, and outcomes of hazardous hyperbilirubinemia in newborns. Pediatrics. 2014 Sep;134(3):504-9. doi: 10.1542/peds.2014-0987. Epub 2014 Aug 4. PMID: 25092943.

