



SCREENING OF INFANTS FOR HYPERBILIRUBINEMIA TO PREVENT CHRONIC BILIRUBIN ENCEPHALOPATHY CLINICAL SUMMARY OF U.S. PREVENTIVE SERVICES TASK FORCE RECOMMENDATION

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| Population | Healthy Newborn Infants ≥ 35 weeks' gestational age |
| I Statement: Insufficient Evidence | No recommendation due to insufficient evidence |

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| Risk Assessment | <p>Risk factors for hyperbilirubinemia include family history of neonatal jaundice, exclusive breastfeeding, bruising, cephalohematoma, ethnicity (Asian, black), maternal age >25 years, male gender, G6PD deficiency, and gestational age <36 weeks.</p> <p>The specific contribution of these risk factors to chronic bilirubin encephalopathy in healthy children is not well understood.</p> |
| Importance | <p>Chronic bilirubin encephalopathy is a rare but devastating condition.</p> <p>Not all children with chronic bilirubin encephalopathy have a history of hyperbilirubinemia.</p> |
| Rationale for No Recommendation | <p>Evidence about the benefits and harms of screening is lacking. Therefore, the USPSTF could not determine the balance of benefits and harms of screening newborns for hyperbilirubinemia to prevent chronic bilirubin encephalopathy.</p> |
| Considerations for Practice | <p>In deciding whether to screen, clinicians should consider the following:</p> <ul style="list-style-type: none">▪ <u>Potential preventable burden.</u> Bilirubin encephalopathy is a relatively rare disorder. Hyperbilirubinemia alone does not account for the neurologic condition of chronic bilirubin encephalopathy. There is no known screening test that will reliably identify all infants at risk of developing chronic bilirubin encephalopathy.▪ <u>Potential harms.</u> Potential harms of screening are unmeasured but may be important. Evidence about the potential harms of phototherapy is lacking. Harms of treatment by exchange transfusion may include apnea, bradycardia, cyanosis, vasospasm, thrombosis, necrotizing enterocolitis, and, rarely, death.▪ <u>Current practice.</u> Universal screening is widespread in the United States. |
| Screening tests | <p>Screening may consist of risk-factor assessment, measurement of bilirubin level either in serum or by transcutaneous estimation, or a combination of methods.</p> |
| Interventions | <p>Phototherapy is commonly used to treat hyperbilirubinemia. Exchange transfusion is used to treat extreme hyperbilirubinemia.</p> |
| Relevant USPSTF Recommendations | <p>USPSTF recommendations on screening newborns for hearing loss, congenital hypothyroidism, hemoglobinopathies, and phenylketonuria (PKU) can be found at http://www.preventiveservices.ahrq.gov.</p> |

For a summary of the evidence systematically reviewed in making these recommendations, the full recommendation statement, and supporting documents please go to <http://www.preventiveservices.ahrq.gov>.

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