

SCREENING NEWBORNS FOR HYPERBILIRUBINEMIA WITH FOLLOW-UP RECOMMENDATIONS

Newborn Nursery

Procedure:

- All infants in the newborn nursery will be initially screened for hyperbilirubinemia using a transcutaneous bilirubin (TcB) at 24 hours of life (HOL), or the morning of the day of discharge, whichever is later.
- Each infant will be assigned a bilirubin risk zone, followed by a bilirubin risk level to determine need for phototherapy and appropriate timing of follow-up.

1. DETERMINATION OF BILIRUBIN RISK ZONE
↓
As above, perform TcB testing at 24 hours of life (HOL) or the morning of the day of discharge, whichever is later.
↓
Enter test results in bilitool.org or plot bilirubin results against time in HOL it was obtained in the attached graph (Figure 1).
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If infant in the high intermediate or high risk zone, send confirmatory total serum bilirubin (TSB) testing, and re-enter results in bilitool.org or plot results against attached graph.

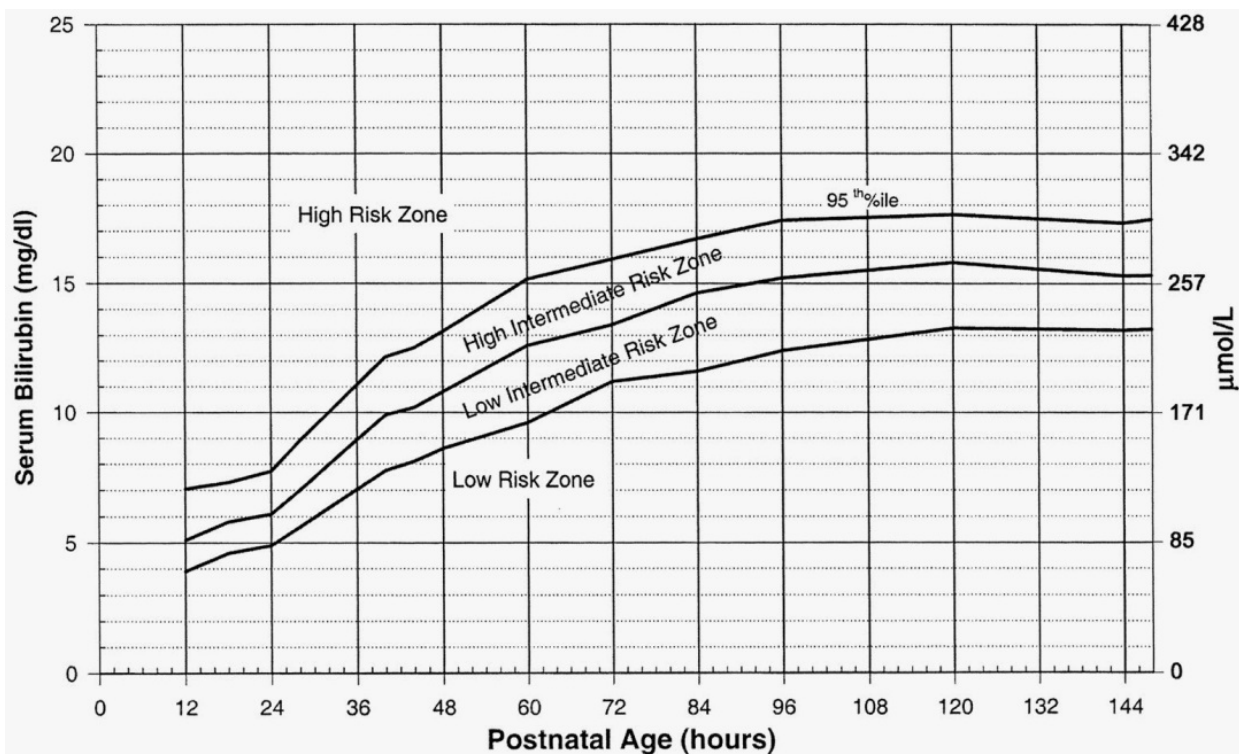


Figure 1: Nomogram of hour specific bilirubin concentrations in healthy term and near-term infants. Risk zones are designated according to percentiles, with infants with values in the high risk zone at increased risk for hyperbilirubinemia requiring intervention.

2. DETERMINATION OF BILIRUBIN RISK LEVEL		
<p style="text-align: center;">↓</p> <p>Based on a combination of gestational age at birth and several additional major risk factors.</p>		
LOW RISK	MEDIUM RISK	HIGH RISK
Infants ≥ 38 weeks and well.	Infants ≥ 38 weeks with risk factors or; Infants 35 0/7 - 37 6/7 and well.	Infants 35 0/7 - 37 6/7 with risk factors.
MAJOR RISK FACTORS TO CONSIDER		
<p>TSB/TcB in the high risk zone</p> <p>Jaundice in first 24 hours</p> <p>ABO incompatibility with positive direct Coombs, or known hemolytic disease</p> <p>Gestational age 35 0/7 - 36 0/7 weeks</p> <p>Prior sibling had phototherapy</p> <p>Cephalohematoma or bruising</p> <p>Exclusive breastfeeding, especially with poor feeding or weight loss</p> <p>East Asian Race</p>		

3. DETERMINATION OF NEED FOR PHOTOTHERAPY

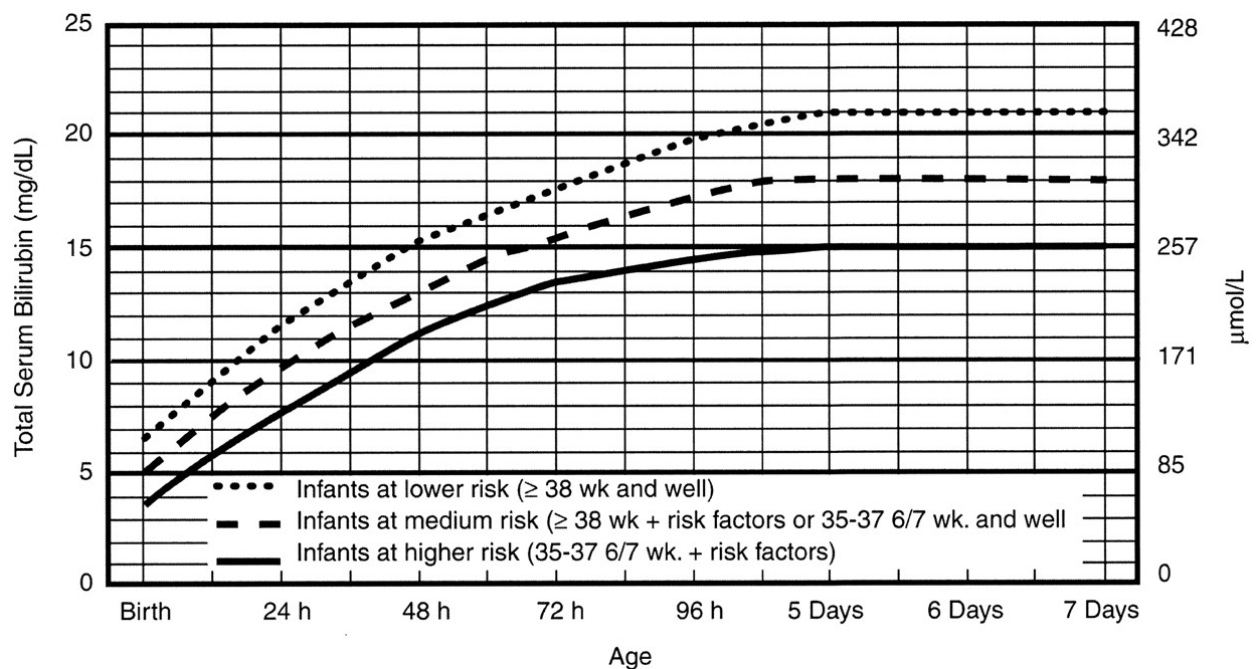
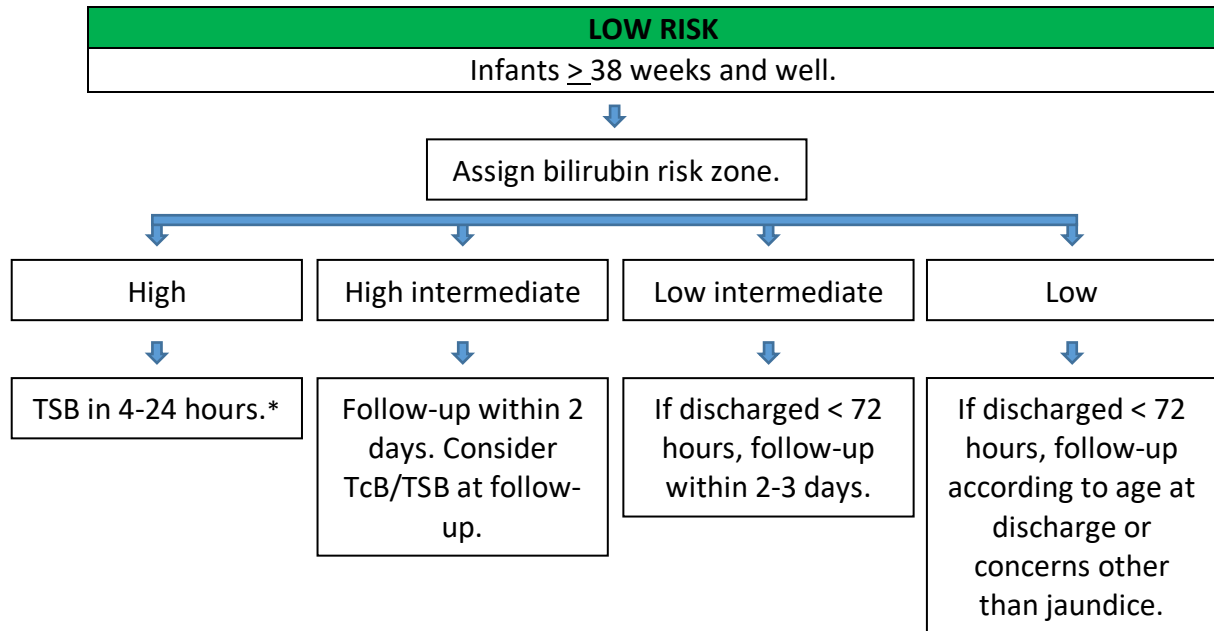
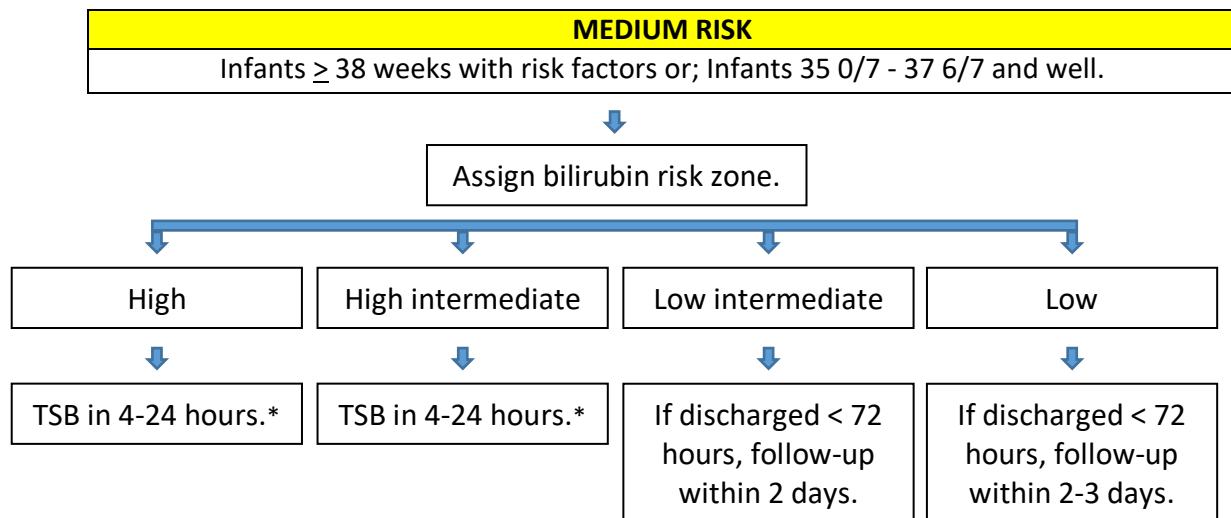


Figure 2: Guidelines for phototherapy among infants ≥ 35 weeks of gestation. Use total serum bilirubin, do not subtract direct fraction. It is an option to start conventional phototherapy at 2-3 mg/dL total serum bilirubin levels below those thresholds shown.

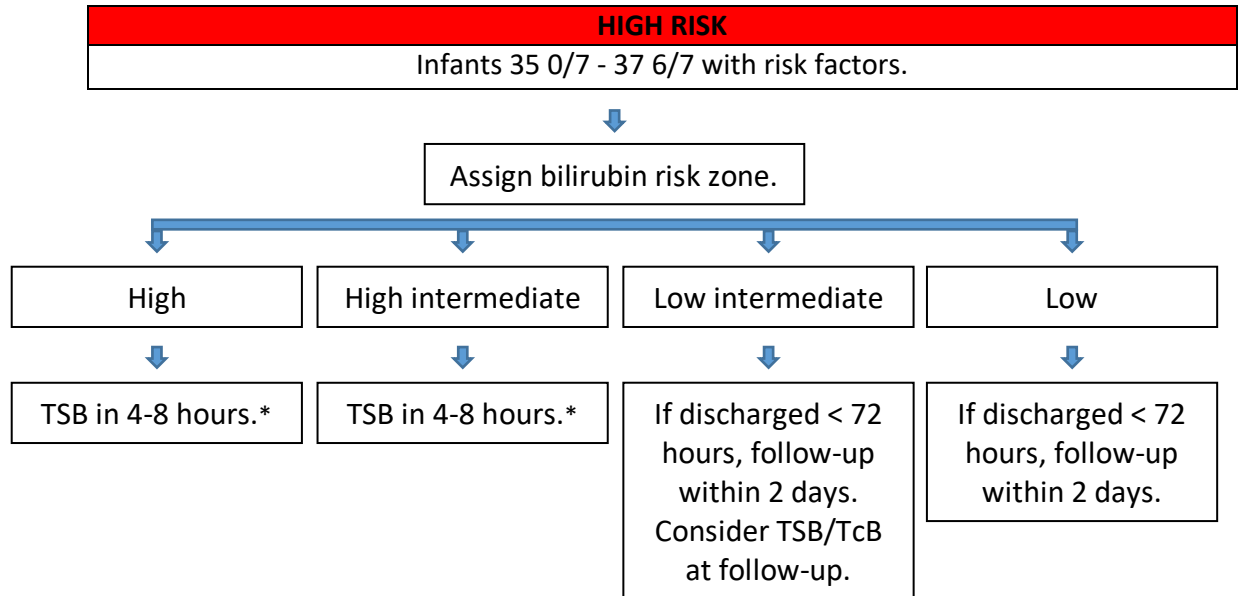
4. RECOMMENDED TIMING OF FOLLOW-UP



* May consider starting conventional phototherapy for infants in the high risk zone.



* May consider starting conventional phototherapy for infants in the high risk or high intermediate risk zone.



* May consider starting conventional phototherapy for infants in the high risk or high intermediate risk zone.