

Section: Division of Nursing

Index: 6170.076b

* **PROTOCOL** *

Page: 1 of 3

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HACKETTSTOWN REGIONAL MEDICAL CENTER

Originator: D. Vanderwiele, RN, MSN, MPA
Department of Pediatrics/Dr. Adam Dick

NEWBORN

(Scope)

TITLE: MANAGEMENT OF JAUNDICE IN THE NEWBORN NURSERY

PURPOSE: To provide guidelines for management of jaundice in the newborn period.

LEVEL: Interdependent

SUPPORTIVE DATA: Jaundice occurs in most newborn infants. Most jaundice is benign, but because of the potential toxicity of bilirubin, newborn infants must be monitored to identify those who might develop severe hyperbilirubinemia and, in rare cases, acute bilirubin encephalopathy or kernicterus.

The American Academy of Pediatrics has made recommendations for management of hyperbilirubinemia in newborns at 35 or more weeks of gestation. Their guidelines provide the framework for Nursery care in the Childbirth Family Center.

CONTENT:

Recommendation	Action	Key Points
Promote successful breastfeeding.	Advise mothers to nurse infants at least 8 to 12 times per day for the first several days.	Poor caloric intake and/or dehydration may contribute to development of hyperbilirubinemia.
Perform ongoing systematic assessments during the neonatal period for risk of developing severe hyperbilirubinemia.	Assess for jaundice every shift (every 8 to 12 hours) in a well-lit room or in daylight near a window.	Jaundice can be detected by blanching the skin with digital pressure and is usually first seen in the face with progression caudally to trunk and extremities.
.	Obtain serum bilirubin measurement on every infant who is jaundiced in the first 24 hours after birth. If there is any doubt about the degree of jaundice, the serum bilirubin should be ordered by the nurse.	All bilirubin levels should be interpreted according to the infant's age in hours. (See "Nomogram for designation of risk" attached)) Visual estimation of bilirubin levels from the degree of jaundice can lead to errors, particularly in darkly pigmented infants.
Physician to evaluate possible causes of jaundice and perform any additional testing.		

Physician to determine need for treatment.	See Phototherapy procedures	
Assess for risk of developing severe hyperbilirubinemia before discharge	Perform routine screening using Bilichek on second day of life. Obtain serum bilirubin and/or assess based on presence of risk factors	Important risk factors most frequently associated with severe hyperbilirubinemia are gestation below 38 weeks, breastfeeding, significant jaundice in a previous sibling, and jaundice noted before discharge. (See table of risk factors attached)
	Provide written and verbal discharge instructions to parents.	Include explanation of jaundice, need to monitor infants for jaundice, and advice on how to monitor.
	Provide instructions for follow up with primary provider after discharge.	

Risk Factors for Development of Severe Hyperbilirubinemia in Infants of 35 or More Weeks' Gestation (in Approximate Order of Importance)

Major risk factors:

Predischarge TSB or TcB level in the high-risk zone (Fig 2)^{25,31}

Jaundice observed in the first 24 h³⁰

Blood group incompatibility with positive direct antiglobulin test, other known hemolytic disease (eg, G6PD deficiency), elevated ETCo_c

Gestational age 35–36 wk^{39,40}

Previous sibling received phototherapy^{40,41}

Cephalohematoma or significant bruising³⁹

Exclusive breastfeeding, particularly if nursing is not going well and weight loss is excessive^{39,40}

East Asian race^{39*}

Minor risk factors

Predischarge TSB or TcB level in the high intermediate-risk zone^{25,31}

Gestational age 37–38 wk^{39,40}

Jaundice observed before discharge⁴⁰

Previous sibling with jaundice^{40,41}

Macrosomic infant of a diabetic mother^{42,43}

Maternal age ≥ 25 y³⁹

Male gender^{39,40}

Decreased risk (these factors are associated with decreased risk of significant jaundice, listed in order of decreasing importance)

TSB or TcB level in the low-risk zone (Fig 2)^{25,31}

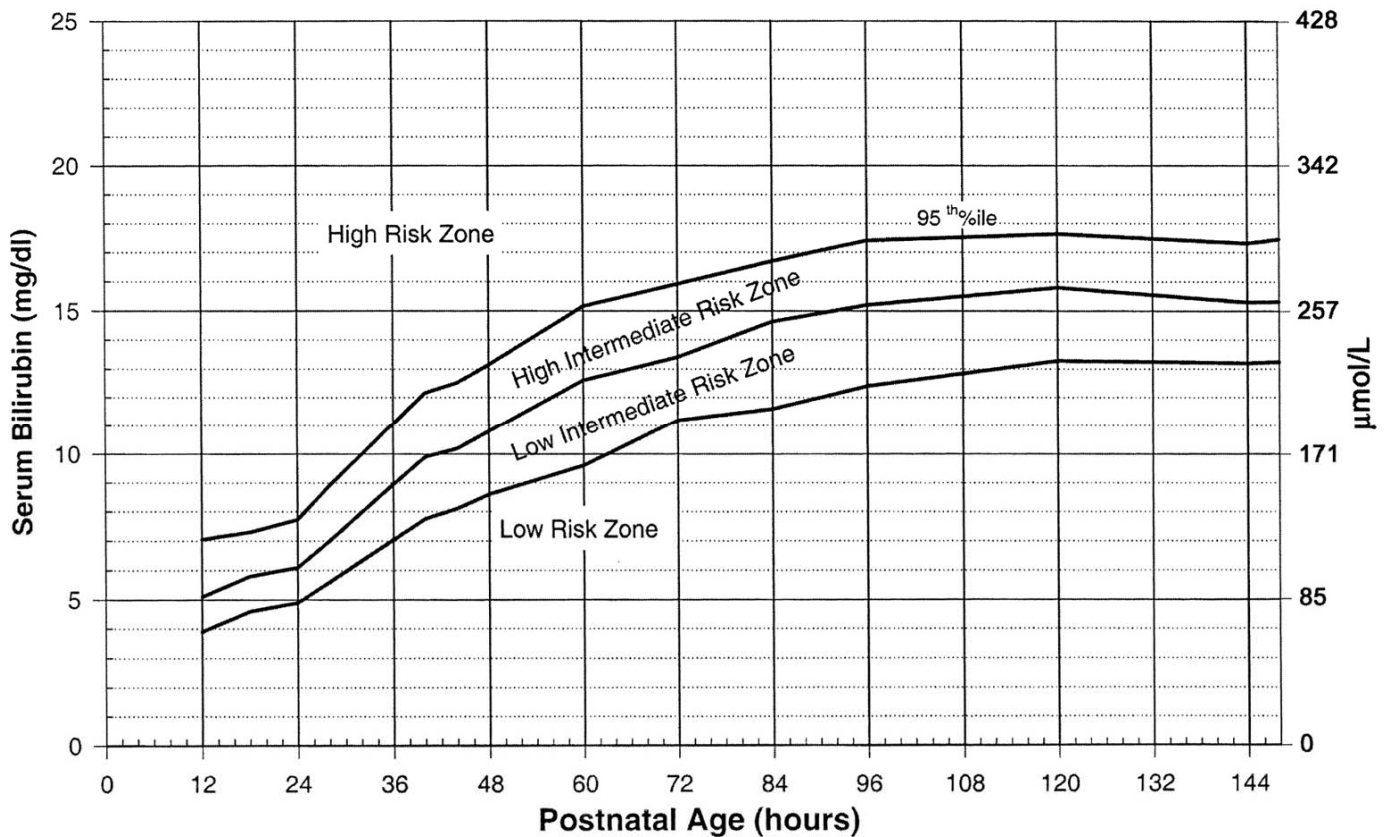
Gestational age ≥ 41 wk³⁹

Exclusive bottle feeding^{39,40}

Black race^{38*}

Discharge from hospital after 72 h^{40,44}

Nomogram for designation of risk in 2840 well newborns at 36 or more weeks' gestational age with birth weight of 2000 g or more or 35 or more weeks' gestational age and birth weight of 2500 g or more based on the hour-specific serum bilirubin values



REFERENCES: American Academy of Pediatrics Clinical Practice Guideline
 "Management of Hyperbilirubinemia in the Newborn Infant 35 or More Weeks of Gestation,"
 Subcommittee on Hyperbilirubinemia; Pediatrics, Vol. 114 No. 1, July 2004, pp 297 – 316.

Index: 6170.076b
Page: 2 of 3
Issue Date: March, 2005
Review Date: Jan. 2008

Index: 6170.076b
Page: 2 of 3
Issue Date: March, 2005
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