Hyperbilirubinemia may result from increased unconjugated or conjugated bilirubin. The unconjugated form or indirect hyperbilirubinemia (Table 8-2) is the type most commonly seen in newborns. The following discussion of hyperbilirubinemia is limited to unconjugated hyperbilirubinemia.

TABLE 8-2
Comparison of Major Types of Unconjugated Hyperbilirubinemia*

Physiologic Jaundice	Breastfeeding-Associated Jaundice (Early Onset)	Breast Milk Jaundice (Late Onset)	Hemolytic Disease
Cause			
Immature hepatic function plus increased bilirubin load from RBC hemolysis	Decreased milk intake related to fewer calories consumed by infant before mother's milk is well established; enterohepatic shunting	Possible factors in breast milk that prevent bilirubin conjugation Less frequent stooling	Blood antigen incompatibility causing hemolysis of large numbers of RBCs Liver's inability to conjugate and excrete excess bilirubin from hemolysis
Onset			
After 24 hours (preterm infants, prolonged)	2nd to 4th day	4th to 8th day	During first 24 hours (levels increase >5 mg/dl/day)
Peak			
3rd to 4th day	3rd to 5th day	10th to 15th day	Variable
Duration			
Declines on 5th to 7th day	Variable	May remain jaundiced for 3 to 12 weeks or more	Depends on severity and treatment
Therapy			
Increase frequency of feedings and avoid supplements. Evaluate stooling pattern. Monitor TcB or TSB level. Perform risk assessment (see Fig. 8-16, *A*). Use phototherapy if bilirubin levels increase	Breastfeed frequently (10 to 12 times/day); avoid supplements such as water, dextrose water, and formula. Evaluate stooling pattern; stimulate as needed. Perform risk assessment (see Fig. 8-16, *A*). Use phototherapy if bilirubin levels increase significantly or significant hemolysis is present. If phototherapy is instituted, evaluate	Increase frequency of breastfeeding; use no supplementation, such as glucose water; cessation of breastfeeding is not recommended. Perform risk assessment (see Fig. 8-16, *A*). Consider performing additional evaluations: G6PD, direct and indirect serum bilirubin, family history, and others as necessary. May include home phototherapy with a temporary (10 to 12 hours) discontinuation of breastfeeding; a	Monitor TcB or TSB level. Perform risk assessment (see Fig. 8-16, *A*). Postnatal: Use phototherapy; administer IV immunoglobulin per protocol; if severe, perform exchange transfusion. Prenatal: Perform transfusion (fetus). Prevent sensitization (Rh incompatibility) of Rh-negative mother