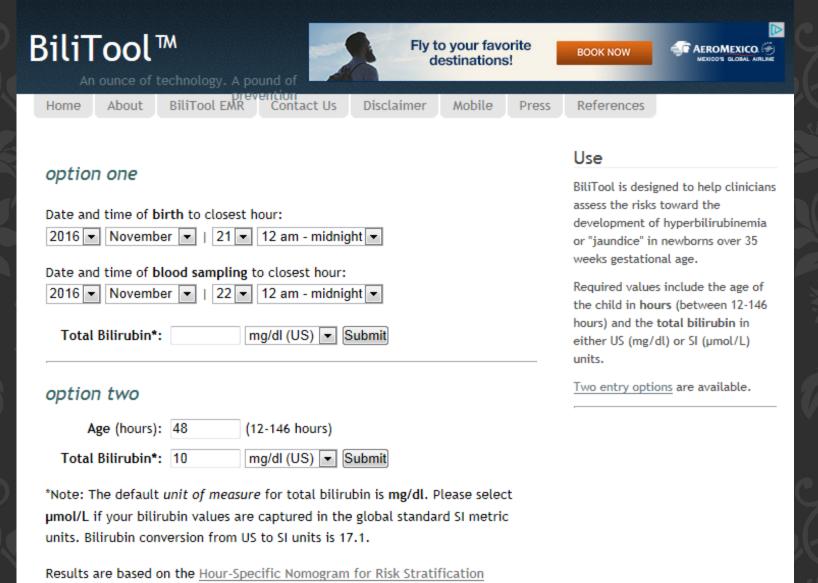
SPECIAL SITUATIONS

Only in the nursery.....



Only in the nursery..... All babies will have a bilirubin tested on day 2 of life (can be serum or transdermal) Go to <u>http://bilitool.org/</u> and enter age in hours and bili level. The tool will guide you the rest of the way.

Note that the transdermal value may be off by 2-3 points



published in <u>"Management of Hyperbilirubinemia in the Newborn Infant 35 or</u> More Weeks of Gestation" (2004) by the AAP journal.

Hour-Specific Nomogram for Risk Stratification

Risk zone	Low Intermediate Risk
Total bilirubin	10 mg/dl
Infant age	48 hours

Risk zone is one of several <u>risk factors</u> for developing severe hyperbilirubinemia.

Recommended Follow-up

Hyperbili Risk Level	Interval
Lower Risk (>= 38 weeks and well)	If discharge age <72 hours, follow-up according to age and other clinical concerns
Medium Risk (>=38 weeks + hyperbili risk factors OR 35 to 37 6/7 weeks and well)	If discharge age <72 hours, follow-up within 48 hours
Higher Risk (35 to 37 6/7 weeks and hyperbili risk factors)	If discharge age <72 hours, follow-up within 48 hours, consider TcB/TSB at follow-up

AAP Phototherapy Guidelines (2004)

Neurotoxicity Risk Level	Start phototherapy?	Approximate threshold at 48 hours of age
Lower Risk (>= 38 weeks and well)	No	15.3 mg/dl
Medium Risk		

Links

Hour-specific nomogram Phototherapy nomogram Exchange nomogram



Hyperbilirubinemia Risk Factors

- TSB/TcB in high-risk zone
- Jaundice in first 24 hours

- ABO incompatibility with positive direct Coombs, known hemolytic disease, or elevated ETCO

- Gestational age 35-36 weeks
- Prior sibling had phototherapy
- Cephalohematoma or bruising

- Exclusive breastfeeding, esp. with poor feeding or weight loss

- East Asian Race

Neurotoxicity Risk Factors

- Isoimmune Hemolytic Disease
- G6PD deficiency
- Asphyxia
- Significant lethargy
- Temperature instability
- Sepsis
- Acidosis
- Albumin < 3.0 g/dL

Check out the hyperbili risk factors to identify the level of risk for the baby. Higher risk means faster/higher

rise.

Higher Risk (35 to 37 6/7 weeks and hyperbili	If discharge age <72 hours, follow-up within 48 hours, consider TcB/TSB at follow-up		Neurotoxicity Risk Factors	Next check
AAP Phototherapy Guidelines (2004)			Isoimmune Hemolytic Disea - G6PD deficiency - Asphyxia - Significant lethargy	the neurotoxicity
Neurotoxicity Risk Level	Start phototherapy?	Approximate threshold at 48 hours of age	 Temperature instability Sepsis Acidosis Albumin < 3.0 g/dL 	risk factors and the bili level
Lower Risk (>= 38 weeks and well)	No	15.3 mg/dl		
Medium Risk (>=38 weeks + neurotoxicity risk factors OR 35 to 37 6/7 weeks and well)	No	13.1 mg/dl		In this example, the
Higher Risk (35 to 37 6/7 weeks and neurotoxicity risk factors)	No	11.4 mg/dl		baby has a bil of 10 – If in a
at TSB levels 2-3 mg/dl (35- phototherapy should not be	nventional phototherapy in the h 50 µmol/L) below those shown. used in infants with risk factors exceeded, please also review A	Home		higher risk category I would repeat

the level in

4hrs.

If phototherapy threshold is exceeded, please also review <u>AAP Guidelines for</u> <u>Exchange Transfusion</u>.



OK to continue breastfeeding Order triple set up for lights Baby goes to mini-nursery Repeat bili and get cbc, retic, blood type and coombs (if not already done) Check bili level q6hrs

Consult neonatology with any concerns.



CCHD screening – pulse oximetry screening for congenital heart defects >3 pt difference between hand and foot is abnormal Performed on all babies after 24 hrs of age



Performed on all babies Initial fail is common Repeat fail, outpatient testing is scheduled by the technician

COOMBS POSITIVE

A Coombs positive result is significant This implies some maternal-fetal blood incompatibility Much higher risk for hyperbilirubinemia Incites fear of Kernicterus Order q6hr bilis on the Coombs positive babies. When drawing the first bili check for cbc/retic/ABO if not already done. If the baby is anemic and reticing it is at higher risk for jaundice. If these babies look sick, formal consult to neonatology