APPROACH TO AN INFANT WITH JAUNDICE

Though recommended by AAP, universal screening of all infants with TSB in order to predict the risk of subsequent hyperbilirubinemia does not seem to be a feasible option in resource restricted settings

Perform visual assessment (VA) of jaundice every 8 to12 h
During initia l3 to 5 days of life
VA can be supplemented with transcutaneous bilirubinometry (TcB), if available

Step 1: Does the baby has serious jaundice?

Yes → **Start Phototherapy**

No → **Step 2:** Does the infant have significant jaundice to require TSB measurement

Yes → **Measure TSB level and determine if baby requires phototherapy or exchange transfusion**

No → **Continue observation every 12 to 24 hours for initial 3 to 5 days**

Step 3: Determine the cause of jaundice and provide supportive and follow up care

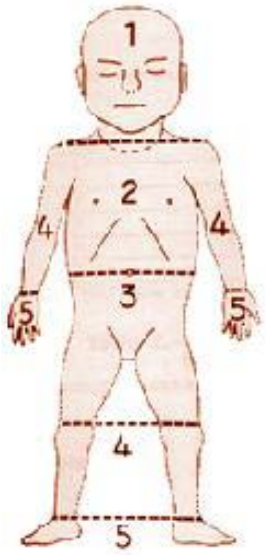
Serious Jaundice:

a. Presence of visible jaundice in first 24 hours
b. Yellow palms and soles anytime
c. Signs of acute bilirubin encephalopathy or kernicterus, hypertonia, abnormal posturing such as arching, retrocollis, opisthotonus or convulsion, fever, high pitched cry.
d. TcB / TSB value more than 95th percentile as per age specific nomogram

Measure Serum Bilirubin if:

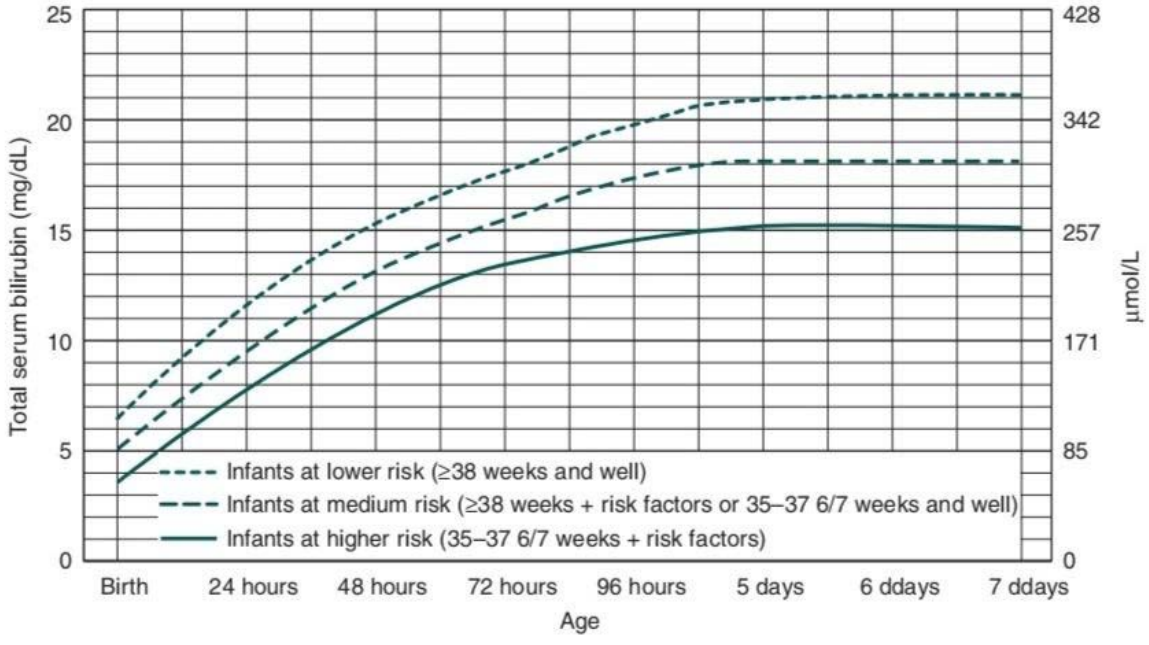
a. Jaundice in first 24 hours
b. Beyond 24 hr: if on visual assessment or by transcutaneous bilirubinometry, TSB is likely to be more than 12 to 14 mg/fL or approaching phototherapy range or beyond
c. If you are unsure about visual assessment

IDENTIFICATION OF JAUNDICE BY VISUAL INSPECTION

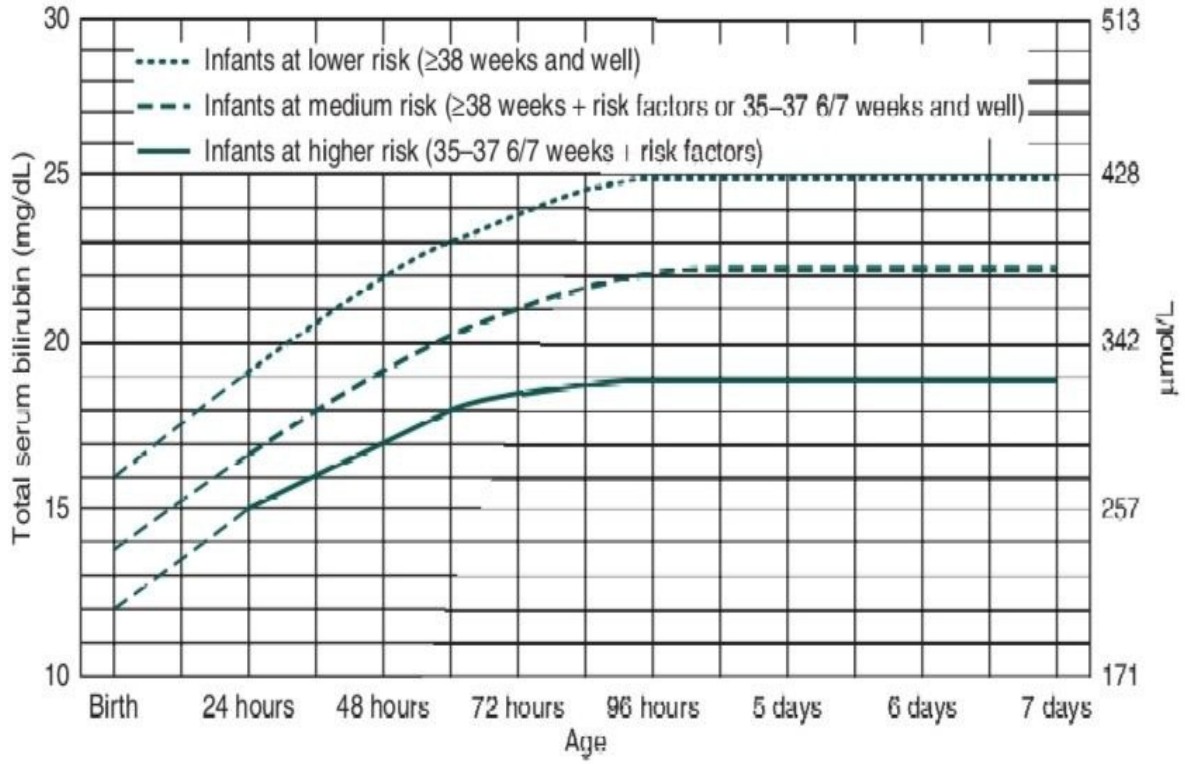


Kramer Zones	Approximate TSB Levels	
	MILD JAUNDICE (Lemon Yellow Color)	DEEP JAUNDICE (Orange Yellow Color)
1 (Face and Neck)	5 to 7 mg / dL	7 to 9 mg / dL
2 (Chest and Upper Abdomen)	7 to 9 mg / dL	9 to 11 mg / dL
3 (Lower Abdomen and Thighs)	9 to 11 mg / dL	11 to 13 mg / dL
4 4 (Legs and Arms/Forearms)	11 to 13 mg / dL	14 to 16 mg / dL
5 (Palsm and Soles)	13 to 15 mg / dL	17 mg / dL or more

GUIDELINES FOR PHOTOTHERAPY IN TERM NEWBORNS (BHUTANI CHART)



GUIDELINES FOR EXCHANGE TRANSFUSION IN TERM NEWBORNS WITH JAUNDICE


Infants at lower risk (≥38 weeks and well)
Infants at medium risk (≥38 weeks + risk factors or 35–37 6/7 weeks and well)
Infants at higher risk (35–37 6/7 weeks + risk factors)
Total serum bilirubin (mg/dL)
µmol/L
30
25
20
15
10
513
428
342
257
171
Birth
24 hours
48 hours
72 hours
96 hours
5 days
6 days
7 days
Age