

Breastfeeding Support Technology

Georgia Tech: Team We Didn't Start the FHIR

Fall 2017

CDC: Sridevi Wilmore & Jennifer Nelson

Mother Entered Data

Carrier 5:07 PM

[< Back](#)

Has your milk come in? (Between the 2nd and 4th postpartum days, did your breast get firm?)

Yes ☒ No ☐

Does your baby nurse approximately every two or three hours, with no more than one longer interval at night (up to 5 hours)?

Yes ☒ No ☐

Is your baby having bowel movements that look like yellow, seedy mustard?

Yes ☒ No ☐

Is your baby having at least six wet diapers a day?

Yes ☒ No ☐

Is your baby being fed any infant formula, water, or other liquids?

Yes ☒ No ☐

[✓ SUBMIT](#)

Carrier 5:06 PM

00:13

[START](#) [STOP](#)

Date 2017-04-26

Start Time 5:06 PM

Stop Time

Duration

Diaper Poop ☐ Pee ☐

Breast Left 1st ☐ 2nd ☐

Breast Right 1st ☐ 2nd ☐

[✓ SUBMIT](#)

[Record](#) [Log](#) [Info](#)

Low Milk Supply and Breastfeeding

*Is your baby having
at least 6 wet
diapers a day?*

Mom reports No

Mrs Thomas is a 24-year-old first time mother who comes in for evaluation of low milk supply. The 7-week-old baby had gained weight well until the last 2 weeks when the mother noticed less wet diapers and a decrease in the volume she was able to pump.

Prior to this visit with you, she had been evaluated by a lactation consultant. At a visit 1 week ago, pre- and post-feeding weights showed low transfer of milk, but no nipple trauma. Her son now has a coordinated suck and swallow, asymmetric latch with a wide angle of the jaw. The mother holds the infant in a neutral position with the head slightly extended. The mother had been healthy prior to the pregnancy, had no pregnancy complications and had an unremarkable labor and delivery. Her breast exam was normal.

Mother's concerns:

- The baby never seems satisfied unless he is breastfeeding, otherwise, he is crying
- Her in-laws, who recently arrived to help with the baby, have encouraged her to stop breastfeeding because he seems so unhappy
- She doesn't think the baby likes her
- She isn't sleeping well
- She feels as if she has already failed as a mother

Probing questions:

- What factors might contribute to the change in milk supply?
- How might you counsel this mother? Her family?
- What are some ways to help this mother increase her milk supply?

Oversupply of Milk and Breastfeeding

Is your feeding approximately every 2 to 3 hours, with no more than one longer interval at night? Mom reports **No**

Alert algorithm calculation: No to question above
Data from Mother App

Amanda is a 27-year-old G₂P₂ mother who comes in with her 3-month-old daughter because of her frequent spitting up. The baby was born at 6 lb 3 oz at 38 weeks of gestation after a vaginal delivery. She spits up nearly every feeding and has frequent watery green frothy stools. She pulls off the breast frequently while nursing, often coughing and sputtering and then will not return to feed. Her feedings are frequent and last about 5 minutes. Her weight is 12 lb at this visit.

Mother's concerns:

- The feeding time seems a lot shorter than with her first child
- The baby seems very gassy no matter what foods mom has tried to eliminate
- Prescription antacids aren't helping
- The baby never seems satisfied
- Mom isn't getting any sleep
- Mom is constantly leaking through breast pads
- When the baby is fed mother's milk from a bottle, she falls asleep and seems happy

Probing questions:

- What might be causing the reflux?
- Why is the baby eating so fast and so frequently?
- How could we help this mother? Describe changes in feeding techniques and positions, and medications.

Has your milk come in? Mom reports **Yes**

Is your baby having bowel movements that look like yellow, seedy mustard? Mom reports **No**

Alert algorithm calculation: No to question above
Data from Mother App

Jaundice and Breastfeeding (Part I)

Kassidy is a 3-day-old exclusively breastfed girl, born at term after an induced vaginal delivery. The baby nursed well in the delivery room within an hour after delivery. She has been feeding every 3 hours since. The baby's last stool, about 18 hours ago, was black and tarry. The baby and mother have the same blood type. A bedside transcutaneous bilirubin measurement at 24 hours of age places the baby in the "high intermediate" range.

Mother's concerns:

- Her nipples are cracked and bleeding
- Her breasts are soft and it doesn't seem as though her milk has "come in" yet
- The baby has lost weight
- The baby does not seem as alert as she was the day before

Probing Questions:

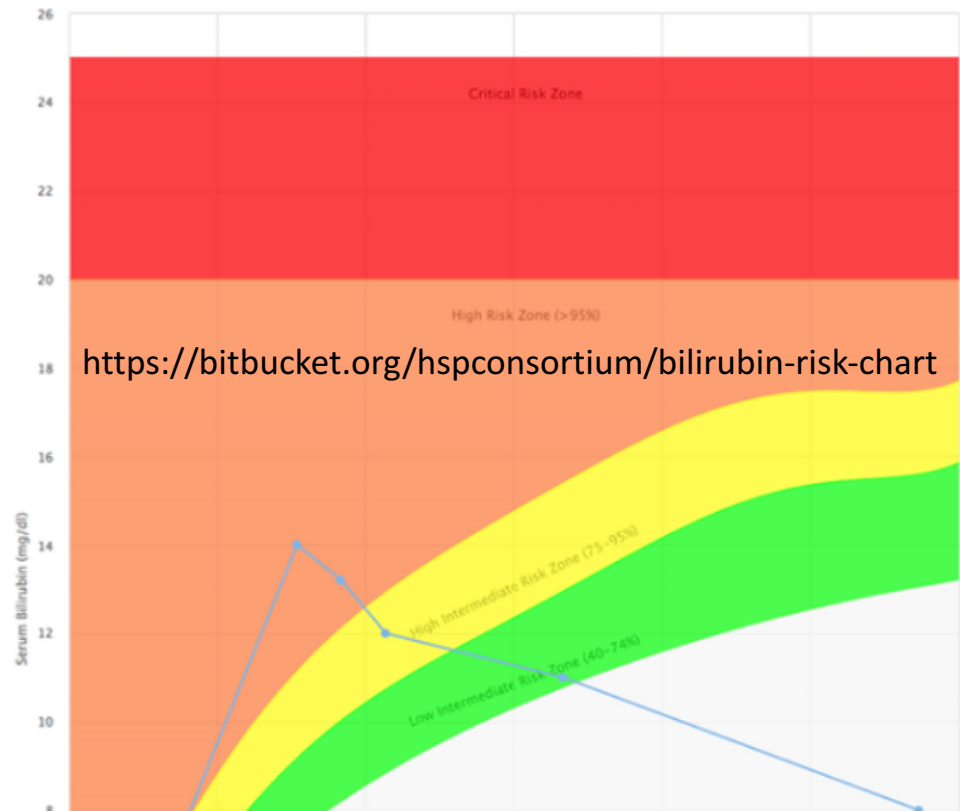
- What factors may be contributing to the baby's hyperbilirubinemia?
- What does it mean to be in the "high intermediate" range?
- What would you do next?
- What do you think about the frequency of feeds?

Name	Age	Weight	Lactation Referral
Baby Thomas	7 weeks 1 day		Transmitted
Baby Kelly	24 weeks 6 days		None
Baby Kassidy	0 weeks 3 days		Initiated
Baby Mike	6 weeks 0 days		None
Baby Brady	28 weeks 2 days		Complete
Baby Amanda	12 weeks 5 days	12lb	Refused

Pediatrician Dashboard Brainstorm

Initiate Lactation Referral

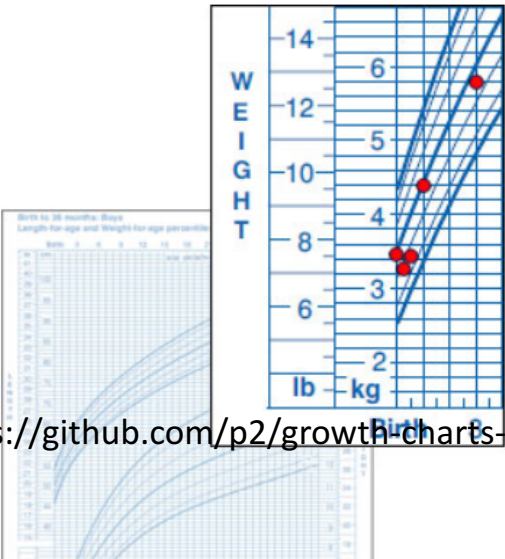
Hour Specific Bilirubin Risk Chart for Term & Near-Term Infants with NO Additional Risk Factors



Patient Overview

First 2 weeks newborn weight tool
<https://www.newbornweight.org/>

CDC Weight-for-Age Growth Chart



Date	Age	Weight (pounds)	CDC Percentile
6/15/2009	Birth	7.5	50
6/18/2009	3 days	7.1	23
6/29/2009	2 weeks	7.4	15
7/15/2009	1 month	9.5	42
9/15/2009	3 months	12.75	49

Patient Name *

First Name

Last Name

Patient Email Address

Patient Phone *

(###)

###

####

Patient DoB *

MM

DD

YYYY

Physician or IBCLC Referring *

First Name

Last Name

Physician or IBCLC Phone *

(###)

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####

Physician or IBCLC Website

Physician or IBCLC Email

Physician or IBCLC Fax

(###)

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Reason for Referral

Referring

Infant

Parent

Both