They are Discharged, Now What? Caring for Infant with Prenatal Exposure in an Outpatient Setting

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Baby Ray

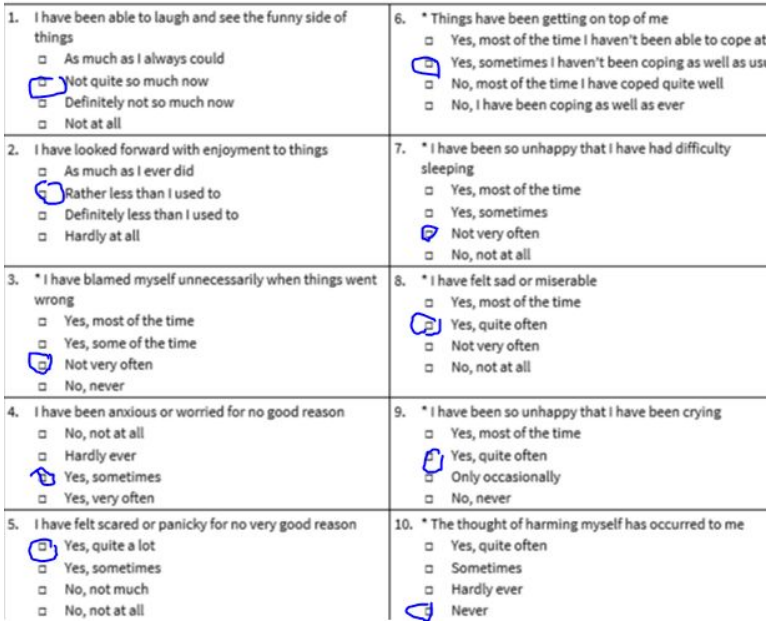
- 5 day old with prenatal substance exposure, first visit to pediatrician
- Discharged with parents. MOC is in recovery and treatment

- Parents present with no discharge summary
- As your staff works to get the discharge summary, you give screeners to the family and start to talk with the family

Screener recommendations?

Screeners

EPDS



1. I have been able to laugh and see the funny side of things □ As much as I always could □ Not quite so much now □ Definitely not so much now □ Not at all	6. * Things have been getting on top of me □ Yes, most of the time I haven't been able to cope at □ Yes, sometimes I haven't been coping as well as usu □ No, most of the time I have coped quite well □ No, I have been coping as well as ever
2. I have looked forward with enjoyment to things □ As much as I ever did □ Rather less than I used to □ Definitely less than I used to □ Hardly at all	7. * I have been so unhappy that I have had difficulty sleeping □ Yes, most of the time □ Yes, sometimes □ Not very often □ No, not at all
3. * I have blamed myself unnecessarily when things went wrong □ Yes, most of the time □ Yes, some of the time □ Not very often □ No, never	8. * I have felt sad or miserable □ Yes, most of the time □ Yes, quite often □ Not very often □ No, not at all
4. I have been anxious or worried for no good reason □ No, not at all □ Hardly ever □ Yes, sometimes □ Yes, very often	9. * I have been so unhappy that I have been crying □ Yes, most of the time □ Yes, quite often □ Only occasionally □ No, never
5. I have felt scared or panicky for no very good reason □ Yes, quite a lot □ Yes, sometimes □ No, not much □ No, not at all	10. * The thought of harming myself has occurred to me □ Yes, quite often □ Sometimes □ Hardly ever □ Never

Psychosocial screeners

- Concerns for food insecurity
- Does not know baby's insurance status

Consider IPV screening

Forming a Supportive Relationship

- Partner with parents or family to help support the infant's health
- Listen to understand
- Empathize with the family
- Ask and talk about treatment and recovery in a positive way
- Congratulate all successes and point out the positives

Care Coordination

- Child Protection may be involved with family
  - Understanding safety plan
  - What resources were put in place
- Nurse family partnership or other home visiting services

Family Supports

- Connecting family with WIC, SNAP, Medicaid
- Connecting mother with postpartum depression resources
- Connecting family substance use disorder treatment
- Connecting family with community partners
- Consider enrolling family in Healthy Steps if available at your clinic
- Schedule at least 2 week, 1 month and 2 month visit to ensure follow up

Baby Maria

- 28 day old, presenting to clinic for the first time with her grandmother who is the guardian
- Discharged from NICU after 17 day stay for NOWS and medication management
- At time of discharge, baby was on 0.7 mg q12hr methadone

Weaning Opioids as an Outpatient

- Pharmacy considerations
  - Need liquid medication
  - Need single dose medication
- How to decide to wean
  - Gaining weight
  - ESC monitoring
- How will family follow up if things aren’t going well
  - Medical safety plan

Baby Archer

- 2 week visit with mother and grandfather
- Known history including intrauterine exposure to marijuana, fentanyl, and methadone
- Required no medication during nursery stay
- Gaining weight well

- Family report infant is getting fussier and they are having a hard time comforting infant

Fussiness

- Take history and look for signs of worrisome crying
  - Signs of illness or poor feeding
  - Cries constantly for 3+ hours
  - Cry is different than normal
  - Family is worried about being able to take care of the infant or keeping the infant safe
- Normalize frustration and taking a break and care of oneself
- Work with families to identify supports for the caregiver - who can they turn to in their network to get support (family, friends)
- Staying safe
  - When frustrated put the baby down in a safe place and take a short break until calm

Strategies for Families

- Ensure infant needs are met such as changing and feeding
- Dr. Harey Karp’s 5S’s: swaddle, side/stomach, shush, swing, suck
- Pacifier
- Reduce stimulation - dim lights, lower volume, minimize interruptions
- Movement - walking, bouncing, baby wearing, moving the carrier
- Noise - white noise, phone/music app, sound machine, fan, vacuum
- Help families identify early cues for tiredness or feeding

Resources for Families

- Fussy Baby Network
  - 1-877-627-9227 (877-6-CRYCARE)
- Healthychildern.org: How to Calm a Fussy Baby
- Healthy Steps, OT referral, Home Health visits

Baby Adam

- 8 day old infant, on your schedule for an acute visit
- History of opioid and marijuana exposure

Chief complaint from foster family: diaper rash

History: frequent loose, watery stools with breakdown of his bottom

Prevention Recommendations

- Frequent diaper changes at least q3-4 hours but should be changes when soiled
- Choose right diaper size to prevent friction
- Clean with diaper wipes and allow time to dry
- “Pat” rather than “wipe” or “scrub”
- Apply barrier ointment to protect skin from urine stool - ensure area is covered “frost”

Diaper Rashes with Redness without Breakdown

- Stay away from wipes - Use water and soft cloth OR just WaterWipes
  - Avoid forceful removal of cream
  - Remove only soiled barrier
- Thick layer of petroleum/zinc barrier with every change
  - Look out and prescribe antifungal cream if yeast
- Diaper free time in prone position
- Bath or sitz bath with warm water only
  - Soak for 10-15 and pat dry
  - No vigorous scrubbing off

Skin Breakdown and Bleeding

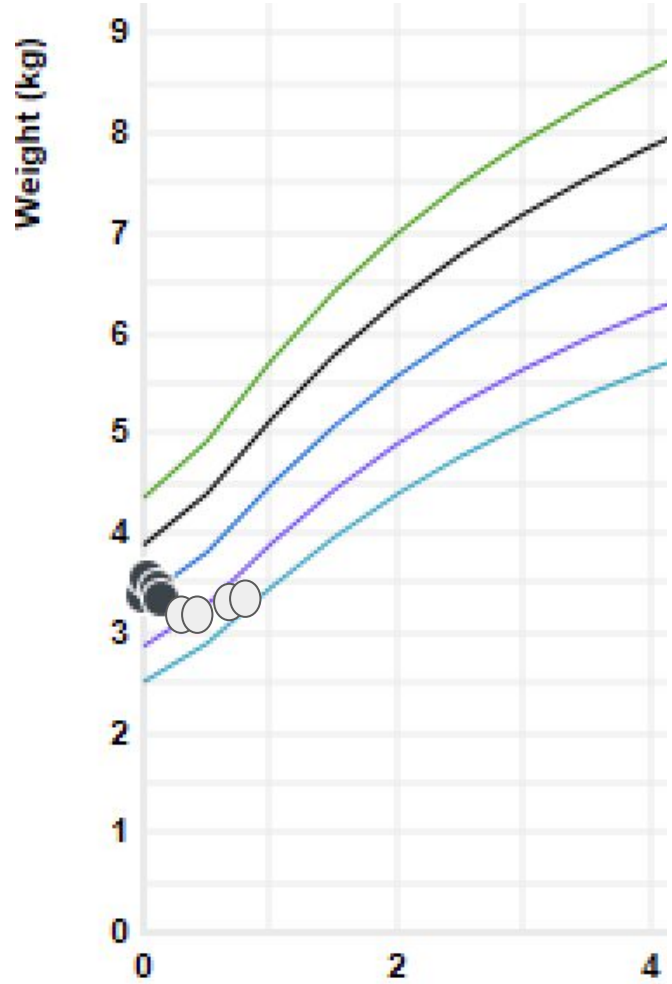
“Crusting” Technique

- Cleanse area
- Apply stomahesive powder and/or nystatin powder to open/wet area
- Allow drying and brush off excess
- Dab or Spray Cavilon™ No Sting Barrier Film over powder
    - Allow barrier film to dry completely
    - If an area is missed, allow the entire area to dry first, then go back and spray the area that was missed.
    - Allow carillon to dry
- Repeat to build up an effective but thin crust.
- Reapply each dressing change to open areas only.

Baby James

- 3 week old, 2nd visit to pediatrician
- MOC on methadone, lives at Aspen Center with baby

- 8 day NICU stay for NOWS monitoring
- Required 2 doses of PRN morphine
- At time of discharge, taking ~2oz of Similac Advance every 2-3 hrs


Weight (kg)
9
8
7
6
5
4
3
2
1
0
0
2
4

Feeding history

- Taking up to 2oz, but sometimes take 40min
- Using Level 1 nipple
- Sleeping 1-2hrs at time, can go 4-5 hours overnight
- Usually getting 7 feeds per day
- Frequent loose, watery stool. Very gassy, seems uncomfortable
- Sometimes fussy between feeds, Mom doing baby wearing, 5 S’s

Recommendations?

Recommendations?

- Frequent, smaller feeds
  - At least 8 per day at this age
- Switch from Sim Advance to Sim Total Comfort
  - Partially hydrolyzed
- Slower flow nipple
- Increase to 22kcal/oz, could go to 24kcal/oz if ongoing poor weight gain

22kcal formula

In Care of Kids

Children's Hospital Colorado

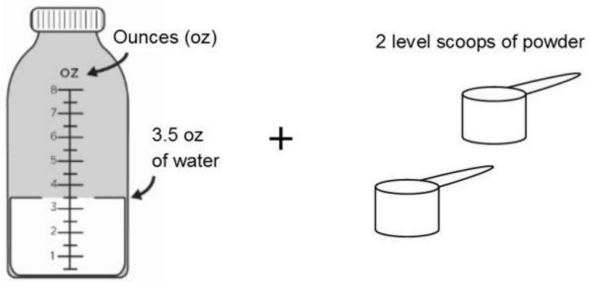
Standard Infant Formula: 22 calories per ounce

Do Not use this recipe for the following formulas:

- Neosure or Enfacare
- Alfamino, Neocate, Pepticate or Puramino
- Nutramigen or Pregestimil
- Extensive HA

Mixing Instructions:

3.5 ounces of water + 2 level scoops of powder



24kcal formula

In Care of Kids

Children's Hospital Colorado

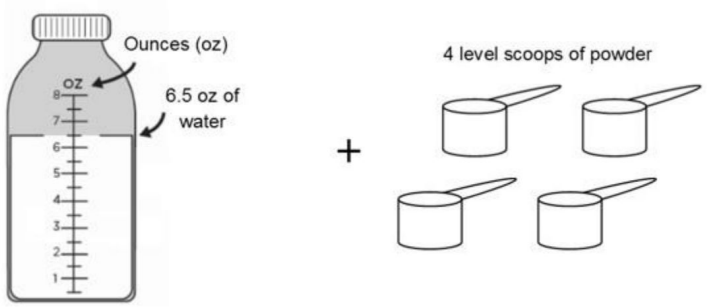
Standard Infant Formula: 24 calories per ounce

Do Not use this recipe for the following formulas:

- Neosure or Enfacare
- Alfamino, Neocate, Pepticate or Puramino
- Nutramigen or Pregestimil
- Extensive HA

Mixing Instructions:

6.5 ounces of water + 4 level scoops of powder



Baby Sarah

- 4 day old
- Discharged from newborn nursery to foster family
- Birth parent left AMA after giving birth

Discharge summary:

- Precipitous labor, NSVD, routine post-natal care
- Maternal Utox positive for methamphetamines, fentanyl (received in labor as well), marijuana
- Received Hep B, vit K, erythromycin
- Passed hearing, CCHD
- Sent maternal labs on admission: Hep B negative, HIV negative. RPR negative
- Feeding Sim Total Comfort 2oz every 2-3 hours, normal stooling, mild diaper rash, consoles and sleeps up to 2hrs at a time

What maternal/birthing person labs do I care about?

Prenatal Labs - Don’t assume they were done!

- HIV
- Hep B
- Hep C
- Syphilis

If you can’t find record of them, consider for baby:

- HIV RNA PCR (Viral Load)
- HIV Rapid Antibody/Antigen
- Hep B surface antigen and antibody
- Hep C antibody (recheck at 18 months for all IPSE)
- Hep C RNA
- RPR
- CBC
- CMP

Following labs and what to do with abnormal/positive results

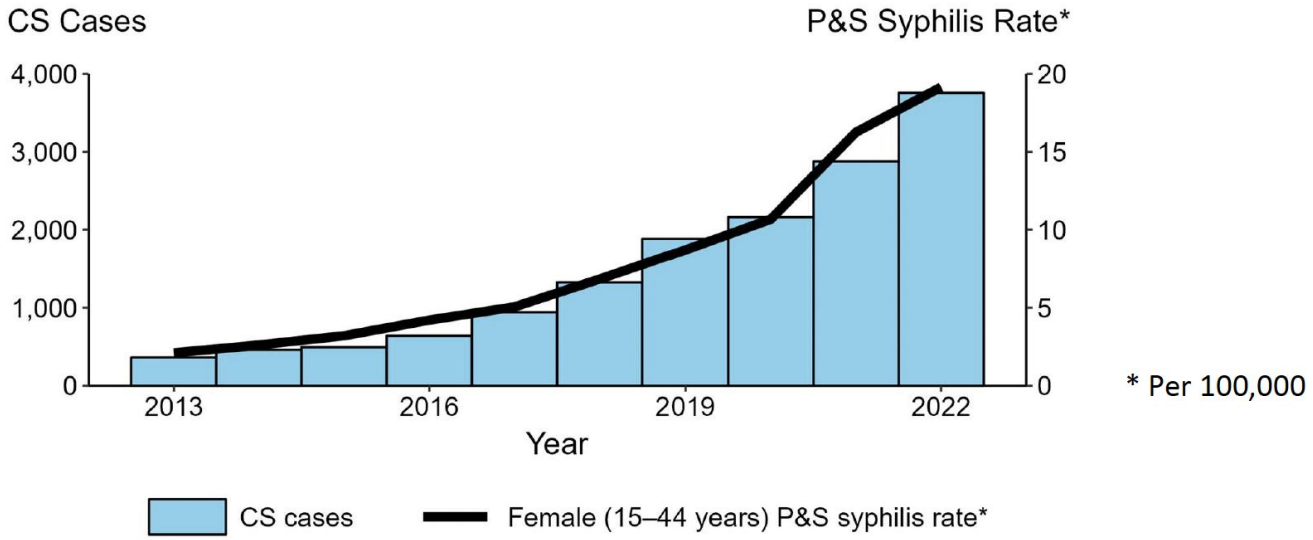
- All infants exposed to hepatitis C during pregnancy or delivery should be tested using a NAT for HCV RNA at age 2 to 6 months of life, and any child with detectable HCV RNA →refer to CHCO Hepatology[1]

- If you have questions or concerns about what labs to order or how to interpret labs use: CHCO One Call (720-777-3999) to talk with infectious disease or CHiP clinic (specializes in HIV)

- Recheck Hep C at 18 months for all IPSE

A quick note about syphilis….

Congenital Syphilis — Reported Cases by Year of Birth and Rates of Reported Cases of Primary and Secondary Syphilis Among Women Aged 15–44 Years, United States, 2013–2022



CDC 2022 STI Statistics Figures (cdc.gov), 2024

When *should* birthing person be tested?

- New guidelines for ALL birthing individuals! Now Mandated, not just Recommended!

3x!

All healthcare settings and medical providers who care for pregnancies must offer syphilis tests:

- in the first trimester of pregnancy (between 1-12 weeks), or at the patient’s initial prenatal visit;
- in the third trimester (between 28-32 weeks);
- at the time of birth, and;
- if there's a miscarriage after 20 weeks or stillbirth

	Mom's test	Mom's treatment	Baby's titers	Baby's exam/lab evaluation	Baby treatment
Proven/ highly probable	+		≥4-fold mom's titer	Abnormal	Aqueous PCN G IV x 10 days
Possible	+	No tx Inadequate tx/timing not documented	≤4-fold mom's titer	Normal	Aqueous PCN G IV x 10 days
Less likely	+	Appropriate tx No re-infection	≤4-fold mom's titer	Normal (no eval)	Benzathine PCN G IM x 1 dose
Unlikely	+	Appropriate tx BEFORE pregnant No re-infeciton	≤4-fold mom's titer	Normal (no eval)	None OR Benzathine PCN G IM x1 if uncertain follow-up

*adapted from RedBook 2021, CHCO Peds ID

Baby José

- New to your practice
- 4 month old, in kinship care with Aunt
- Available history includes term birth, intrauterine exposure to meth, fentanyl, heroin
- Unknown initial birth course - previous pediatrician adequately addressed infection/lab follow-up
    - (You will still repeat Hep C at 18 months!)
- Growing well, sleeping well, hitting milestones thus far

- Aunt is wondering about development and how best to support José

Substance	Long Term Outcomes	Level of Evidence
Nicotine	Increased risk of obesity, hypertension Increased risk of asthma Increased risk of ADHD Increased risk of nicotine dependence Some suggestion of increased risk of cancer	Substantial
Alcohol	Cognitive impairment (eg, lower IQ) Specific cognitive skills may be impaired (eg executive function, memory) even if global cognitive function (IQ) is within normal limits Difficulty with adaptive skills, social skills Increased risk of ADHD, ODD Increased risk of depression, substance use, some suggestion of increased risk of psychotic disorders (eg schizophrenia)	Substantial
Cannabis	Increased risk of attention problems, reduced cognitive function and reduced academic performance Challenges with executive functioning (impulsivity, hyperactivity) Increased risk of mental health concerns in adolescence (depression, anxiety) Earlier initiation of cannabis use	Moderate
Amphetamines	Some data suggesting delayed development of motor skills in the first 2 years of life Heightened emotional reactivity Increased risk of anxiety and depression in toddler/early school years	Limited
Cocaine	Difficulty with sustained attention Difficulty with behavioral self-regulation Increased risk of substance use	Limited
Opioids (includes licit and illicit opioids)	Increased risk of ophthalmologic disorders (eg strabismus, nystagmus) Challenges with executive functioning (attention, impulsivity, hyperactivity) Increased risk of mental health concerns in adolescence (depression, anxiety) Some data suggests decreased cognitive function	Limited
Benzodiazepines	Some data suggests increased risk of decreased cognitive function, reduced academic achievement, impaired motor development, and internalizing behaviors	Scant
Poverty	Increased risks of accidents including accidental death Increased risk of illness including asthma and lung infections Increased risk of neurocognitive effects including unfulfilled potential educational and vocational achievement	Substantial

Developmental Monitoring

- All IPSE should be referred to Early Intervention!

- Common pitfalls:
  - Referral placed (ideally at birth hospitalization) – call made to family and unable to be reached, intake not scheduled, etc
  - Don’t need medical decision maker consent for referral, DO need it to receive the services
    - Case worker or GAL can be helpful to get this consent if out of home placement
  - Babies “seem” OK so referral not made

- ANYONE can refer to EI!

- Additional OT referral can be helpful for feeding issues, sensory processing, etc

Developmental Monitoring

- Lots of overlap with behavioral issues, ADHD, Autism
- Referral to Developmental Pediatrics for comprehensive evaluations early
  - Waitlists can be long!
- Specific pathway for IPSE for referral to CHCO BLOSSOM NICU follow-up clinic

What can be done?

1. Safe, stable, nurturing relationships
2. Read to child
3. Play with child
4. Have a medical home
5. Support social needs of family
6. Language we use
7. Harm Reduction
   - Safe sleep, lock boxes, Naloxone, Poison Control Number (1-800-222-1222), attend WCCs
8. Build positive child experiences
9. Build resiliency of family
10. Early Intervention/Child Find referral!