

# Substance Use Disorder in Special Populations: **Pregnancy**

Andrea L. Silva, M.D. • 05.27.2020

# Overview

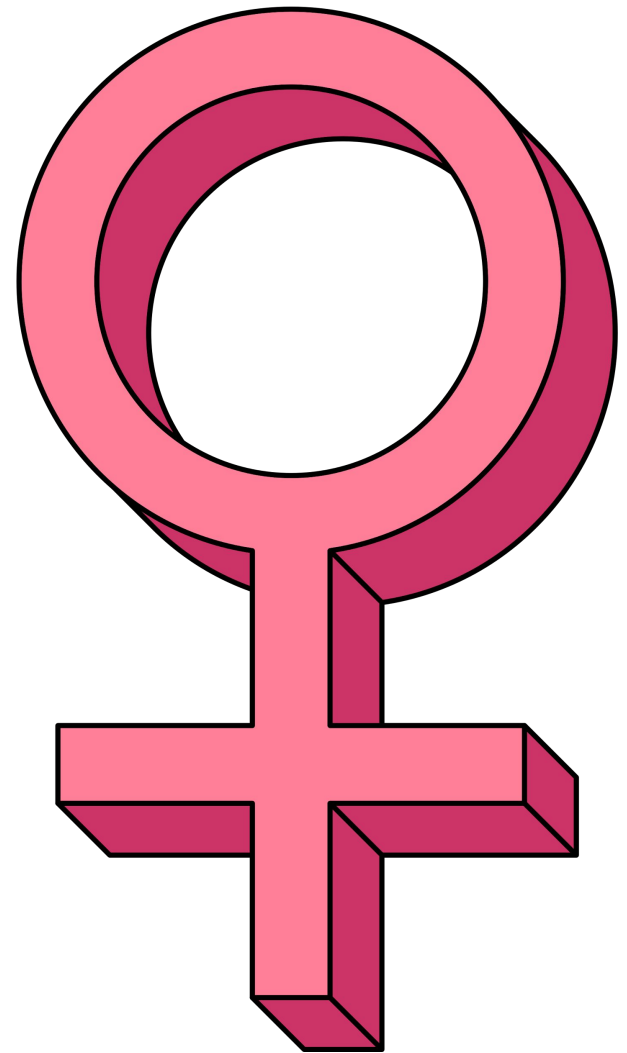
Background Info/ Etiology  
General Principles of Care  
Screening  
OB Complications  
MAT  
Postpartum Care  
Marijuana  
NAS

---

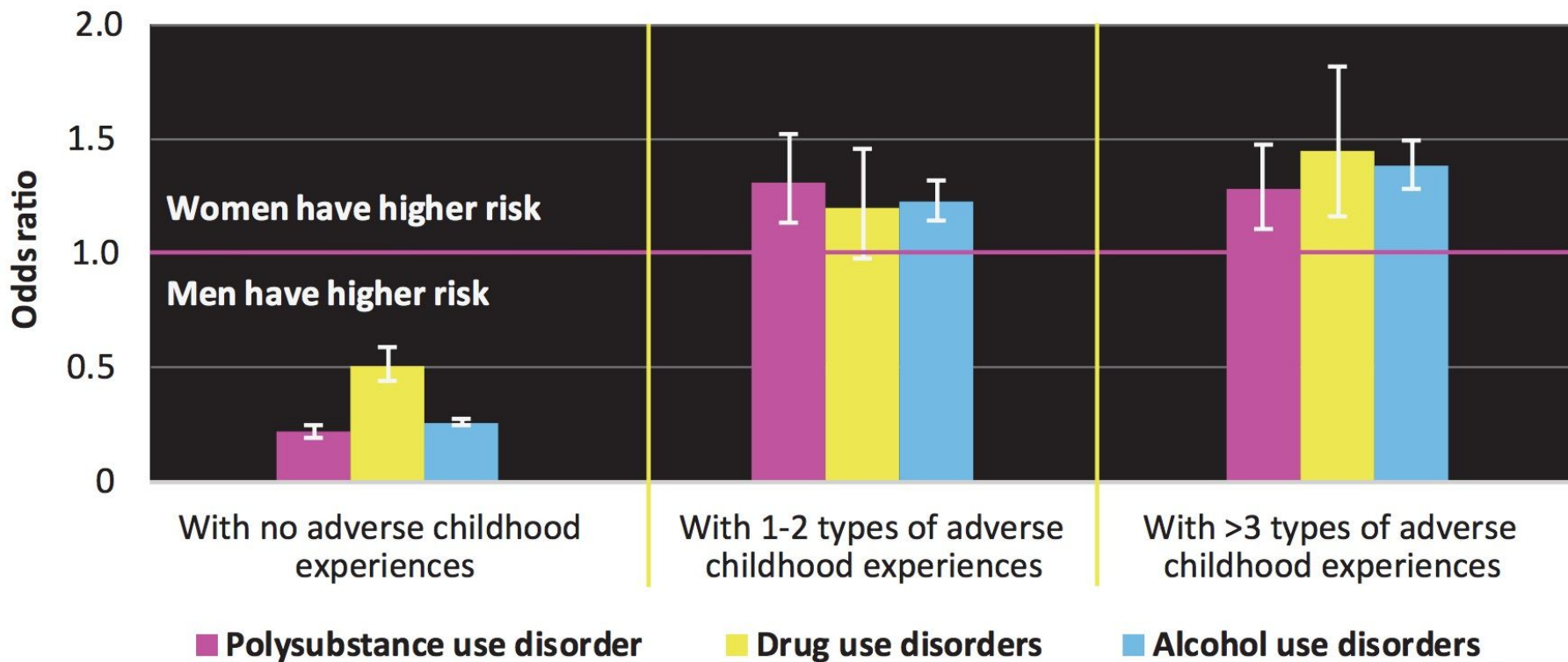
# Background Info and Etiology

## Women face unique issues when it comes to substance use

- **Unique reasons** for using drugs
- Use **smaller amounts of drugs** for **less time** before becoming addicted
- More drug **cravings**
- More likely to **relapse** after tx
- More likely to go to the **ER** or die from **overdose**
- **Domestic violence**



# Gender, ACEs, and Risk of SUD

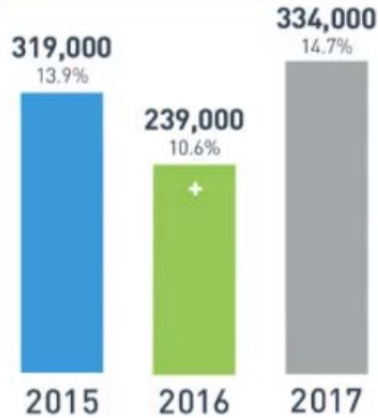


# Substance Use in Past Month Among Pregnant Women

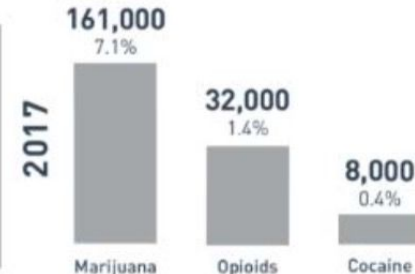
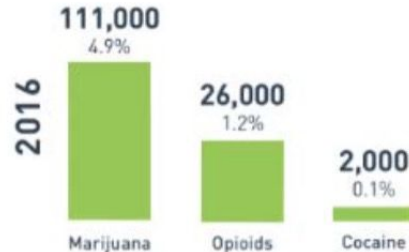
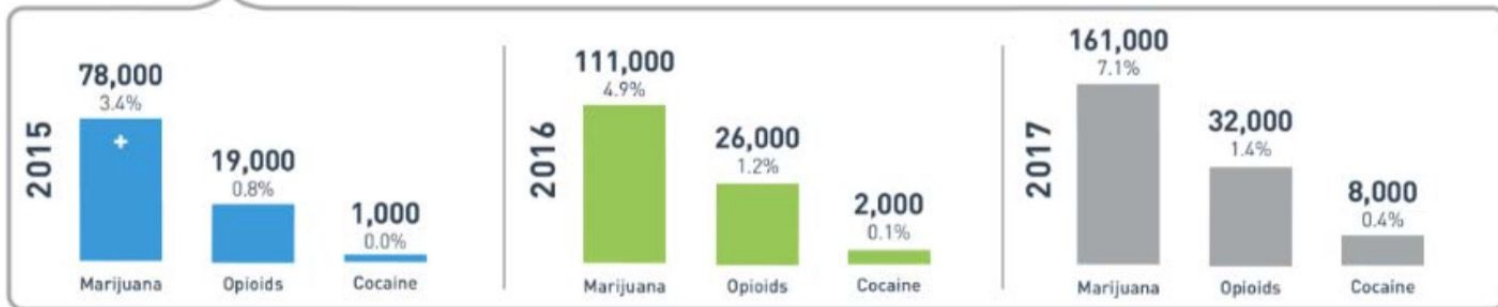
## ILLICIT DRUGS



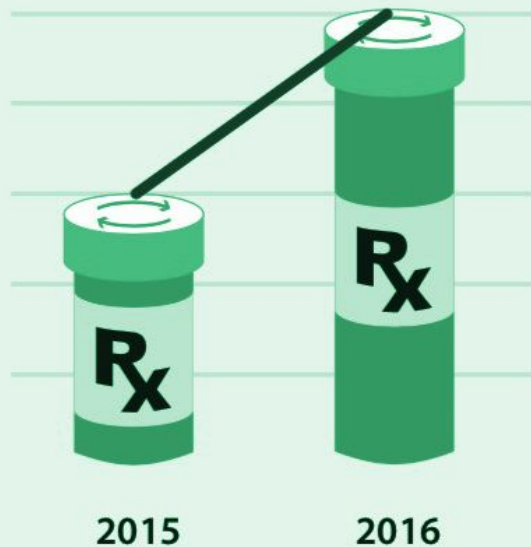
## TOBACCO PRODUCTS



## ALCOHOL



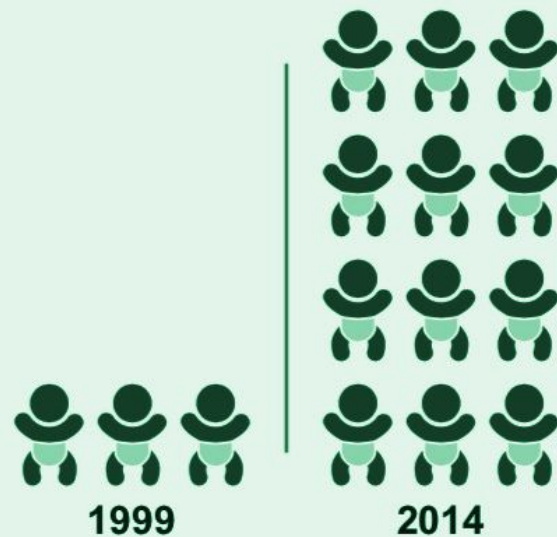
# The Toll



The rate of overdose deaths among women rose 20% in one year.



Opioid use disorder has gone up more than 4 times among pregnant women.



4 times as many infants were born with neonatal abstinence syndrome (NAS) in 2014 than in 1999.

# Risk Factors for SUD in Pregnancy

- Adolescent
- Less education
- Late entry to care
- Multiple missed prenatal visits
- Impaired school/work
- Sudden change in behavior
- STDs
- Past OB hx of unexplained adverse events
- Children not living with mom
- PMH related to drug use
- Poor dentition
- Poor weight gain
- Dx of mental illness
- Family hx of drug use/mental illness
- Partner with substance abuse



# General Principles of Care

**Ensure appropriate prescribing.**

**Maximize & enhance prescription drug monitoring programs.**

**Ensure mothers with OUD receive adequate post-birth care, including substance use treatment and relapse-prevention programs.**

**Ensure pregnant women with OUD have access to medication assisted treatment and related services.**



- Educate patients
- Identify substance users
- Identify comorbid conditions
- **Know local resources**
- Nonjudgmental care
- Assemble multidisciplinary team
- Address housing, food
- Test for STDs
- Assess for fetal growth restriction
- Consult anesthesia service prior to delivery
- Inform Peds service
- Discuss risks/benefits of breastfeeding
- **Educate staff, break down stigma!**





## Medication-Assisted Treatment for Substance Use Disorders



[Back to MAT home](#) •

### Opioid Treatment Program Directory

Select to view the opioid treatment programs in a State

California



#### Opioid treatment programs in California

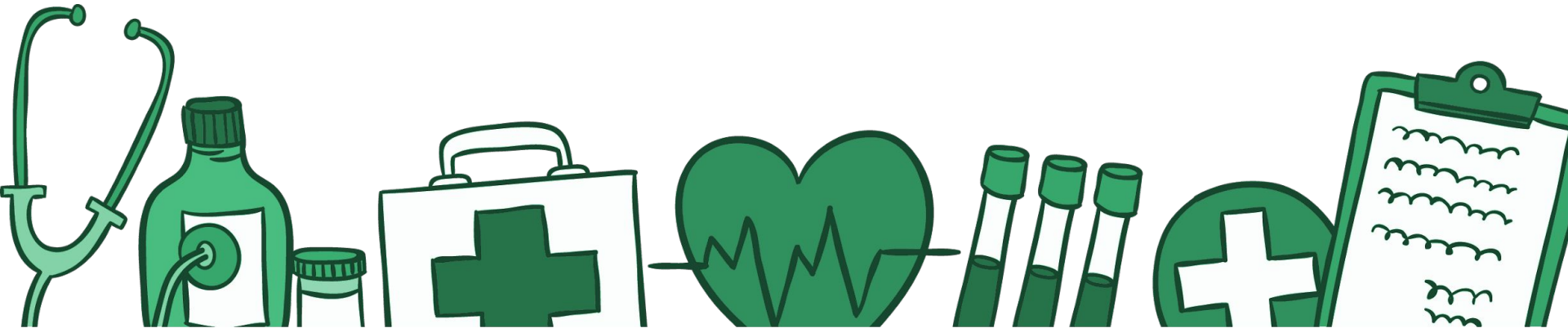
[Download Excel](#)

1 2 3 4 5 6

Program Name	Street	City	State	Zip Code	Phone	Certification	First Full Certification Date	
Aegis Treatment Centers, LLC	1235 McHenry Avenue, Suites A & B	Modesto	CA	95350	(209) 527-4597	Certified	05/01/2004	<a href="#">Map</a>
Genesis Narcotic Treatment Program	800 Scenic Drive	Modesto	CA	95350	(209) 525-6146	Certified	02/29/2004	<a href="#">Map</a>

# Screening

- Screening tools
  - **4 P's Plus**
  - **CRAFFT**
  - **NIDA Quick Screen**
  - TAPS
  - SURP-P
  - WIDUS
- Universal screening advised
- **Screening tool + Utox = best**
- First PNC visit, then q Trimester
- Start by asking about lawful substances (i.e. tobacco)
- Ask frequency/route/quantity
- Self-help programs



**Perinatal Providers**

INITIAL SCREEN  REPEAT SCREEN

**EAST BATON ROUGE PARISH**

4Ps Plus Screen for Perinatal Substance Abuse and Domestic

Physician: \_\_\_\_\_ Case #: \_\_\_\_\_

Patient Name: \_\_\_\_\_ Date: \_\_\_\_\_

Date Of Birth: \_\_\_\_\_ Race: \_\_\_\_\_ Age: \_\_\_\_\_

Address: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Patient's Phone #: \_\_\_\_\_

Provide Domestic Violence Assessment	Provide Substance Abuse Prevention/ Education	Provide Tobacco Intervention and/or Substance Abuse Assessment
--------------------------------------	---	--

<i>Parents</i>	Did either of your parents have any problem with drugs or alcohol?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<i>Partner</i>	Does your partner have any problem with drugs or alcohol?
Is your partner's temper ever a problem for you?		<input type="checkbox"/> No
Have you ever felt out of control or helpless?		<input type="checkbox"/> No
Does your partner threaten to hurt you or punish you?		<input type="checkbox"/> No
<i>Past</i>	Have you ever drunk beer/wine(wine cooler)/daiquiri/liquor?	<input type="checkbox"/> No
	Have you ever felt down, depressed or hopeless?	<input type="checkbox"/> No
	Have you lost interest in things that used to be fun to you?	<input type="checkbox"/> No
<i>Pregnancy</i>	In the month before you knew you were pregnant, how many cigarettes did you smoke?	<input type="checkbox"/> No
	In the month before you knew you were pregnant, how much wine/beer/liquor did you drink?	<input type="checkbox"/> No

**Follow-up Questions to 4Ps Plus**

- Sometimes a woman feels depressed, nervous, or stressed out. When this happens to you, do any of the following help you feel better or to relax?
  - Talk things over with friends or relatives?  No  Yes
  - Smoke cigarettes?  No  Yes
  - Smoke marijuana or pot?  No  Yes
  - Have a drink of beer, wine or other alcohol?  No  Yes
  - Take some type of pill or medication?  No  Yes
- And last month, about how many days a week did you usually drink beer, wine, a daiquiri or liquor?
 

Did not drink  Every day  3 to 6 days a week  1 or 2 days a week  Less than 1 day a week
- 3a. During the month before you knew you were pregnant, about how many days a week did you usually use marijuana?
 

Did not use any drug  Every day  3 to 6 days a week  1 or 2 days a week  Less than 1 day a week
- 3b. During the month before you knew you were pregnant, about how many days a week did you usually use any drug such as cocaine, heroin or meth?
 

Did not use any drug  Every day  3 to 6 days a week  1 or 2 days a week  Less than 1 day a week
- 4a. And last month, about how many days a week did you usually use marijuana?
 

Did not use any drug  Every day  3 to 6 days a week  1 or 2 days a week  Less than 1 day a week
- 4b. And last month, about how many days a week did you usually use any drug such as cocaine, heroin, or meth?
 

Did not use any drug  Every day  3 to 6 days a week  1 or 2 days a week  Less than 1 day a week
5. And last month, about how many days a week did you usually smoke cigarettes?
 

Did not smoke  Every day  3 to 6 days a week  1 or 2 days a week  Less than 1 day a week

© NTI Upstream 2015. Sample form. Not for distribution or reproduction with

Intervention and Referrals Made: Check all that apply

Referral	Referral Accepted?	
<input type="checkbox"/> Brief Intervention	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Domestic Violence	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Tobacco Cessation	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Substance Abuse Treatment	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Mental Health	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Other, Specify: _____	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Refer for further evaluation 

Date: \_\_\_\_\_ Signature: \_\_\_\_\_

Circle: MD RN MSW LPN NP MA RD BCSAC Other: \_\_\_\_\_

Screening Site: \_\_\_\_\_



# The CRAFFT Screening Interview

Begin: "I'm going to ask you a few questions that I ask all my patients. Please be honest. I will keep your answers confidential."

## Part A

During the PAST 12 MONTHS, did you:

	No	Yes
1. Drink any <u>alcohol</u> (more than a few sips)? (Do not count sips of alcohol taken during family or religious events.)	<input type="checkbox"/>	<input type="checkbox"/>
2. Smoke any <u>marijuana</u> or <u>hashish</u> ?	<input type="checkbox"/>	<input type="checkbox"/>
3. Use <u>anything else</u> to get high? ("anything else" includes illegal drugs, over the counter and prescription drugs, and things that you sniff or "huff")	<input type="checkbox"/>	<input type="checkbox"/>

For clinic use only: Did the patient answer "yes" to any questions in Part A?

No



Ask CAR question only, then stop

Yes



Ask all 6 CRAFFT questions

	No	Yes
1. Have you ever ridden in a <u>CAR</u> driven by someone (including yourself) who was "high" or had been using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>
2. Do you ever use alcohol or drugs to <u>RELAX</u> , feel better about yourself, or fit in?	<input type="checkbox"/>	<input type="checkbox"/>
3. Do you ever use alcohol or drugs while you are by yourself, or <u>ALONE</u> ?	<input type="checkbox"/>	<input type="checkbox"/>
4. Do you ever <u>FORGET</u> things you did while using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>
5. Do your <u>FAMILY</u> or <u>FRIENDS</u> ever tell you that you should cut down on your drinking or drug use?	<input type="checkbox"/>	<input type="checkbox"/>
6. Have you ever gotten into <u>TROUBLE</u> while you were using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>



# NIDA Drug Screening Tool

NIDA-Modified ASSIST (NM ASSIST)

In the past year, how often have you used the following?

Alcohol (For men, 5 or more drinks a day. For women, 4 or more drinks a day)

Never	Once or Twice	Monthly	<b>Weekly</b>	Daily or Almost Daily
-------	---------------	---------	---------------	-----------------------

Tobacco Products

Never	Once or Twice	Monthly	<b>Weekly</b>	Daily or Almost Daily
-------	---------------	---------	---------------	-----------------------

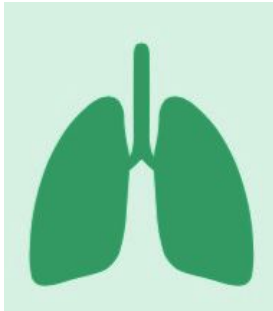
Prescription Drugs for Non-Medical Reasons

Never	Once or Twice	Monthly	<b>Weekly</b>	Daily or Almost Daily
-------	---------------	---------	---------------	-----------------------

Illegal Drugs

Never	Once or Twice	Monthly	<b>Weekly</b>	Daily or Almost Daily
-------	---------------	---------	---------------	-----------------------

# OB Complications



Placental abruption  
Fetal death  
Intra-amniotic infection  
Fetal growth restriction  
Fetal passage of meconium  
Preeclampsia  
Premature labor  
PROM/PPROM  
Placental insufficiency  
Miscarriage  
Postpartum hemorrhage  
Septic thrombophlebitis

## Risks of Stillbirth from Substance Use in Pregnancy

- Tobacco use—1.8 to 2.8 times greater risk of stillbirth, with the highest risk found among the heaviest smokers
- Marijuana use—2.3 times greater risk of stillbirth
- Evidence of any stimulant, marijuana, or prescription pain reliever use—2.2 times greater risk of stillbirth
- Passive exposure to tobacco—2.1 times greater risk of stillbirth

*Source: Tobacco, drug use in pregnancy, 2013*

# Unintended Pregnancy Rates

**General population**  
unintended pregnancy:  
**30-50%**

**Women with OUD** and  
unintended pregnancy:  
**86%**

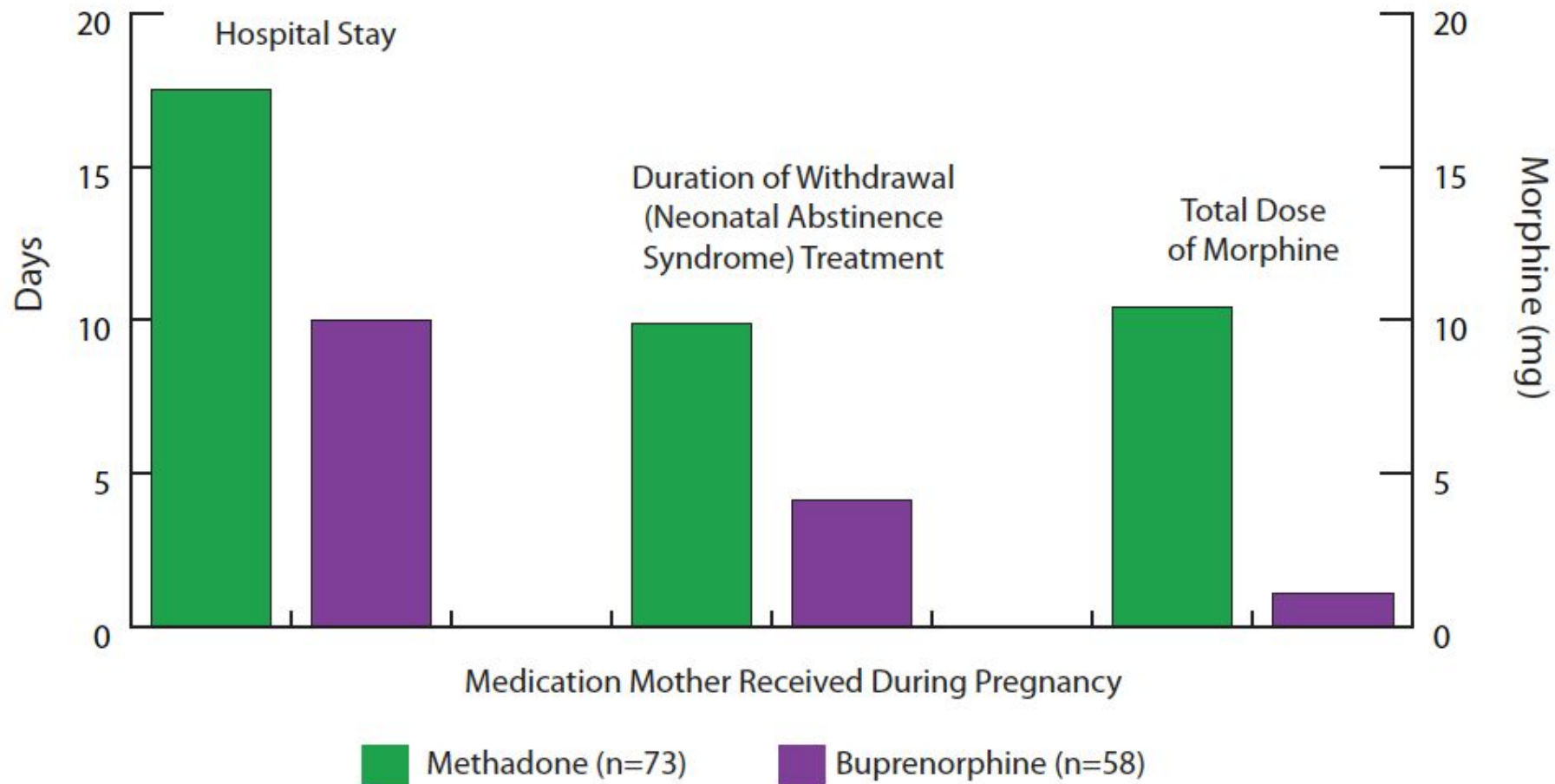


# Medication-Assisted Therapy (MAT)

- **Preferred to detoxification**
- **Overwhelming advantages**
  - Decrease mortality
  - Decrease drug overdose
  - Decrease acquisition of HIV, Hep C
  - Decrease relapse
  - Better maternal nutrition and PNC
  - Less stress on fetus
- **Methadone vs. Buprenorphine?**



## Mothers' Buprenorphine Treatment During Pregnancy Benefits Infants





# Postpartum Care

- **Treat postpartum pain!**
  - Can divide MAT doses up to q6 hours if needed
  - Use NSAIDs
  - Full opiate agonist if needed (avoid partial agonists if on MAT for OUD)
- **Don't stop MAT**
- **What about breastfeeding?**



## ABM Clinical Protocol #21: Guidelines for Breastfeeding and Substance Use or Substance Use Disorder, Revised 2015

Sarah Reece-Stremtan,<sup>1,2</sup> Kathleen A. Marinelli,<sup>3,4</sup> and The Academy of Breastfeeding Medicine



## Drugs and Lactation Database (LactMed)

Bethesda (MD): [National Library of Medicine \(US\)](#); 2006-.

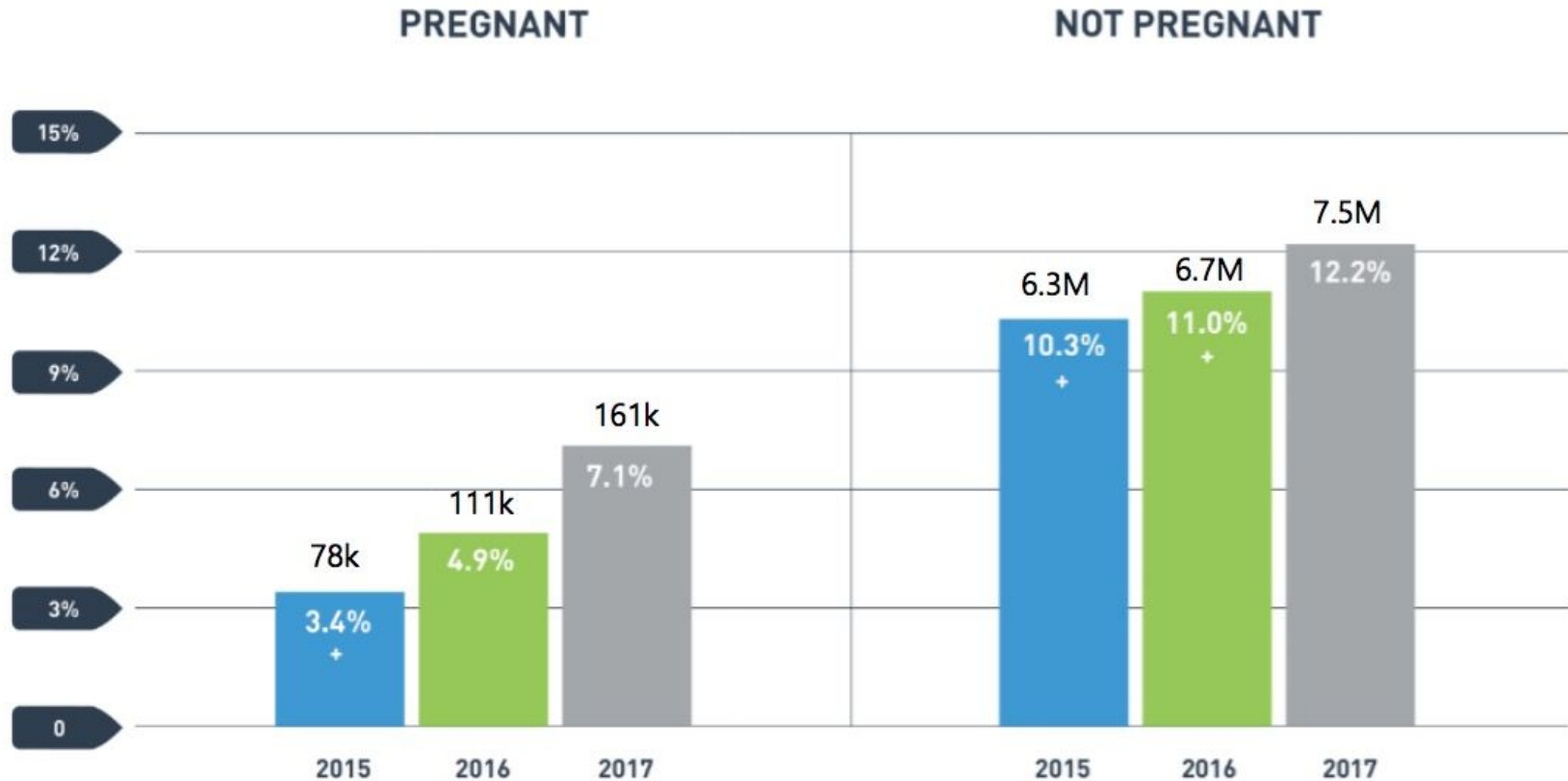
[Copyright and Permissions](#)

Search this book

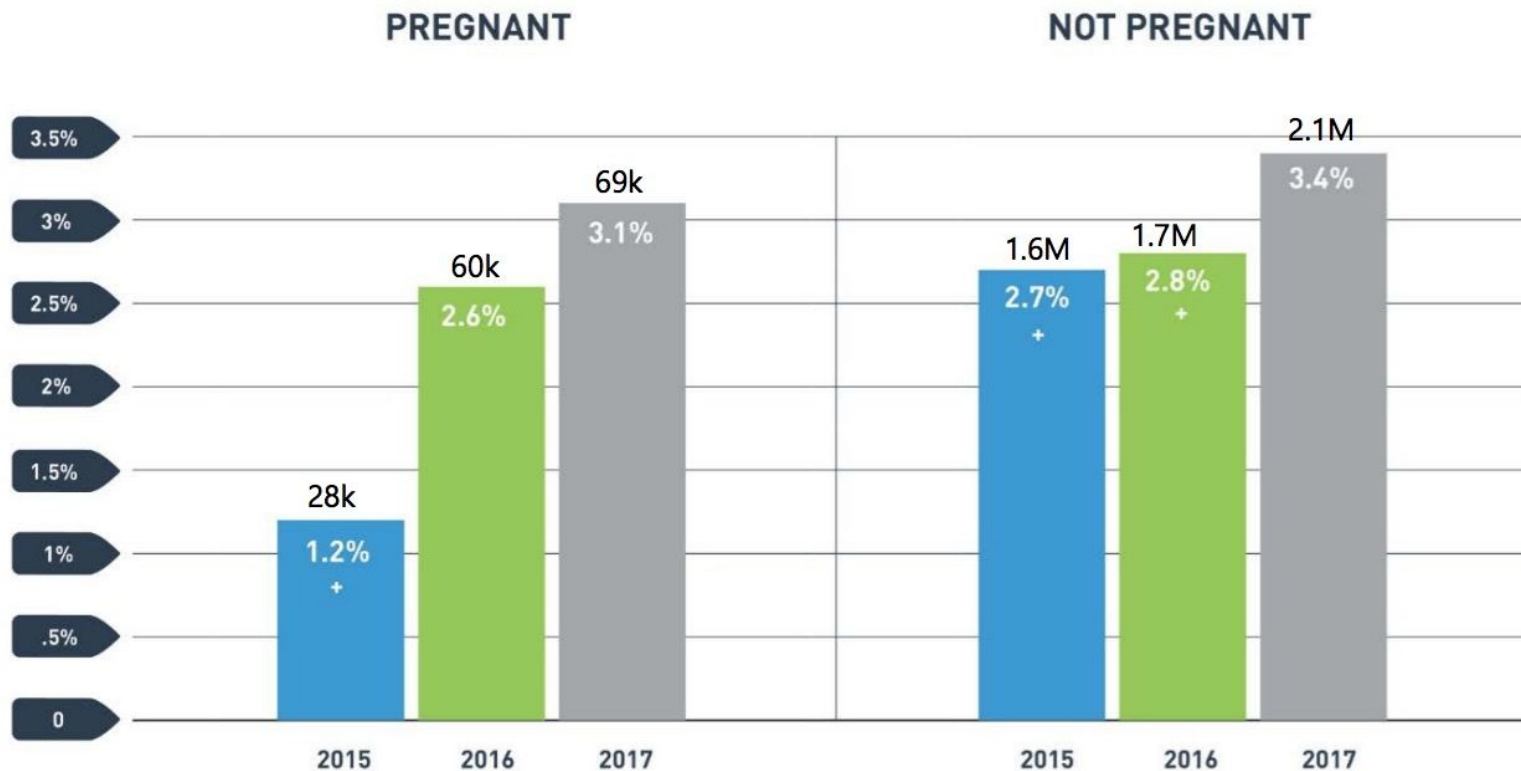
Exposure	Breastfeeding?
Methadone/Buprenorphine	Yes
Other opioids	Yes, but CAUTION with codeine
Marijuana	Unclear
Alcohol	Wait minimum 2 hours after last drink, and no more than 1-2 drinks per day
Tobacco	Yes, CAUTION with nicotine replacement therapy
Stimulants	<b>No</b>
Benzodiazepines	Yes, but observe closely
Naltrexone/Naloxone	Yes
HIV	<b>No</b>
Hep C	Yes, if no blood exposure

Marijuana

# MJ Use Among Women by Pregnancy Status



# Daily MJ Use Among Women by Pregnancy Status



Most common illicit substance used in pregnancy.

**Perceived lack of risk is increasing.**

50% of women who use MJ will continue while pregnant.

**ACOG, AAP, and ABM discourage MJ use during pregnancy and lactation.**



2x risk of preterm birth in MJ users?

Increase in SGA babies, abruption, NICU transfers, low apgar scores?

3x risk neonatal morbidity or death?

**Detrimental neurobehavioral outcomes in exposed children.**

# Neonatal Abstinence Syndrome (NAS)

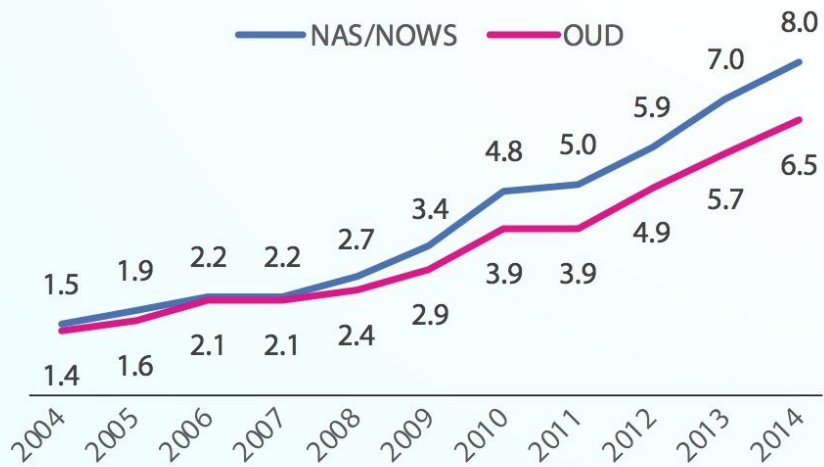


# Every 15 mins

A baby is born suffering from opioid withdrawal

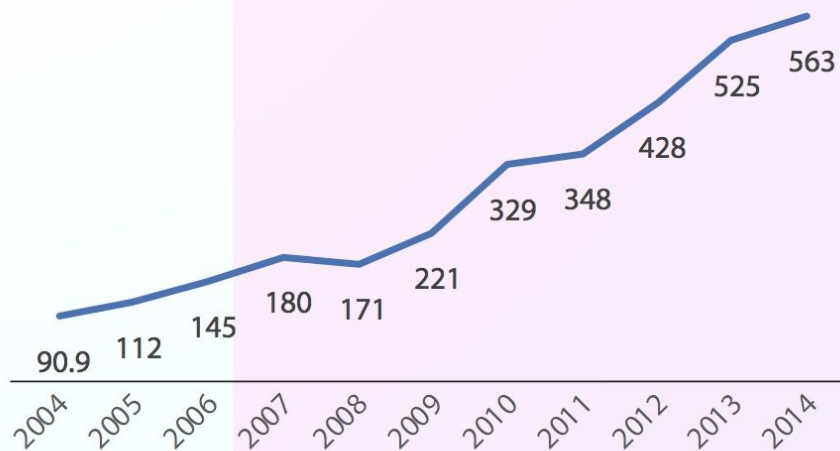
## NAS/NOWS and Maternal Opioid Use Disorder on the Rise

Rates per 1,000 Hospital Births



## Growing Hospital Costs for Treatment of NAS/NOWS

Inflation-Adjusted U.S. Dollars (millions)



# NAS Symptoms

- Poor weight gain
- HR, RR, and temp instability
- Hyperactive
- Irritable/ High-pitch cries
- Hyper/Hypotonia
- Sucking difficulty or excess
- Sleep disturbances



# NAS Treatment

- Primary tx: supportive
  - In room
  - Skin to skin
  - Lower ambient light/noise
  - Swaddling
  - Frequent, small feeds
- Finnegan Scoring
- When to medicate?

## SIGNS

Observations from past 3–4 hours.

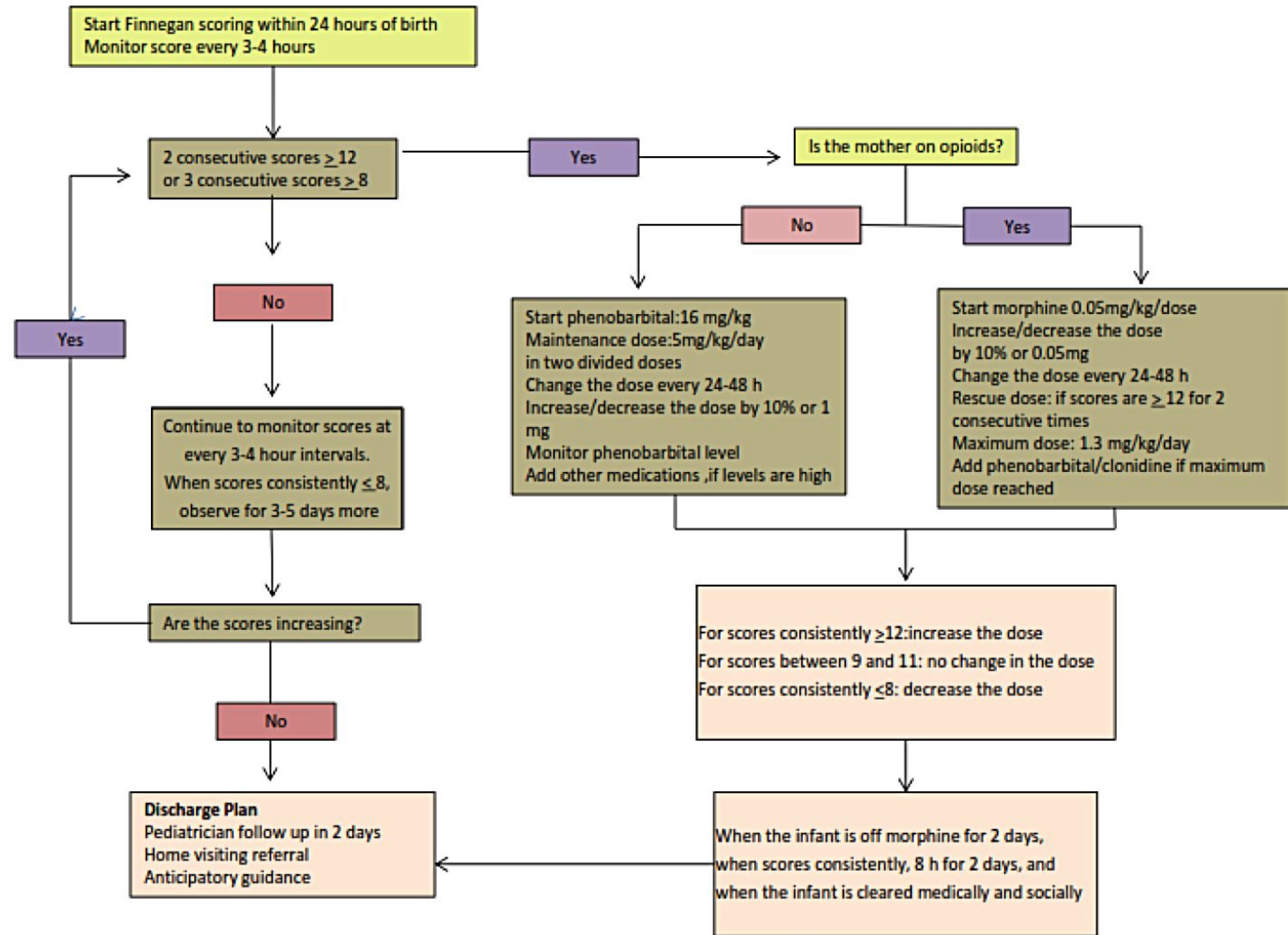
Start new scoring sheet each calendar day.

Birth Weight: \_\_\_\_\_ grams (x 90% = \_\_\_\_\_ grams)

Daily Weight: \_\_\_\_\_ grams

DATE:	SCORE	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME
High pitched cry: inconsolable >15 sec. OR intermittently for <5 min.	2								
High pitched cry: inconsolable >15 sec. AND intermittently for ≥5 min.	3								
Sleeps <1 hour after feeding	3								
Sleeps <2 hours after feeding	2								
Sleeps <3 hours after feeding	1								
Hyperactive Moro	1								
Markedly hyperactive Moro	2								
Mild tremors: disturbed	1								
Moderate–severe tremors: disturbed	2								
Mild tremors: undisturbed	1								
Moderate–severe tremors: undisturbed	2								
Increased muscle tone	1–2								
Excoriation (indicate specific area): _____	1–2								
Generalized seizure	8								
Fever ≥37.2°C (99°F)	1								
Frequent yawning (≥4 in an interval)	1								
Sweating	1								
Nasal stuffiness	1								
Sneezing (≥4 in an interval)	1								
Tachypnea (rate >60/min.)	2								
Poor feeding	2								
Vomiting (or regurgitation)	2								
Loose stools	2								
≤90% of birth weight	2								
Excessive irritability	1–3								
Total score									
Initials of scorer									

Printed Name	Signature/Title	Initials	Printed Name	Signature/Title	Initials



Questions?

---