Neonatal Abstinence Syndrome

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SCOPE Vermont Training Series

Supporting Children of the OPioid Epidemic

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This project is supported, in part, by:

Objectives

- Define neonatal abstinence syndrome (NAS) and neonatal opioid withdrawal syndrome (NOWS)
- List one pharmacological and one non-pharmacological intervention for NAS
- Understand VT specific protocols around CARA/CAPTA legislation
- Discuss the parental experience and stigma related to NAS

Definitions:

Neonatal abstinence syndrome (NAS): A constellation of symptoms that can occur in newborns exposed to certain substances during pregnancy including opioids, benzodiazepines and barbiturates.

Neonatal opioid withdrawal syndrome (NOWS): A constellation of symptoms that can occur in newborns exposed to opioids during pregnancy including prescription opiate medications, heroin or fentanyl, and medications for opioid use disorder.

Signs & Symptoms of NOWS

Neurologic:

- Increased muscle tone (stiffness)
- Increased startle (moro) reflex
- Tremors (jitters)
- High pitched cry
- Seizures (very rare)

Gastrointestinal:

- Feeding difficulty
- Excessive sucking
- Frequent loose or watery stools
- Vomiting
- Difficulty gaining weight

Autonomic:

- Fever
- Sweating
- Rapid breathing
- Frequent yawning
- Sneezing or congestion

Other:

- Excoriation (rash)
- Sleep disruption

Timeline: Symptom Onset Depends on Opioid

Short acting opioids:

- Example medications: Percocet, oxycodone, morphine
- Example illicit substances: heroin, fentanyl
- Onset of symptoms <24hr after last dose

Long-acting opioid antagonists:

- Examples: buprenorphine (Subutex), buprenorphine-naloxone (suboxone), methadone
- Onset of symptoms 24-72hr after last dose (rarely as late as 5 days)

Facts:

- Only 50% of infants with known opioid exposure during pregnancy develop signs of NAS/NOWS
- NAS/NOWS symptom severity is NOT related to the amount of opioid used (medication dose does not predict symptoms)
- NAS/NOWS symptoms are treatable and resolve with time
- Many infants with symptoms of NAS/NOWS are treated with non-pharmacologic measures
- At UVM Medical Center <20% of infants require medications to treat NOWS

Non-pharmacologic treatments

Feeding strategies:

- Breastfeeding or breastmilk
- Small frequent feeds
- Non-nutritive sucking
- Increased calorie feeds

Support of Mother-Infant Dyad:

- Rooming in, Parental presence
- Skin to skin
- Parental psychological and social support (trauma informed care)

Environmental modifications:

- Gentle handling
- Low lights
- Quiet environment
- Swaddling

Other therapies:

- Aromatherapy
- Music therapy
- Massage
- Acupuncture / acupressure

Pharmacologic treatment of NOWS

Opioids:

- Morphine
- Methadone
- Buprenorphine
- Tincture of opium (old)

Adjuncts:

- Clonidine
- Phenobarbital

Duration of treatment is variable:

May be 1-3 doses of medication or require several weeks of treatment and weaning

Location of treatment is also variable: Some hospitals provide medication therapy while rooming-in with parents, other places require transfer to the NICU

Transitioning home

Health care appointments and referrals upon discharge from the hospital

- Primary Care/Pediatrician
- Home Visiting
- Early Intervention
- Postpartum appointment
- Additional community supports

Federal law on substance use in pregnancy (1)

CAPTA

Child Abuse Prevention and Treatment Act

and

CARA- Comprehensive Addiction and Recovery Act

CARA →

1974

- Enacted to provide federal funding to support prevention, assessment, investigation, prosecution, and treatment activities related to child abuse and neglect

2003

- Amendment: governors must assure policies and procedures are in place to address the needs of infants "*born with and identified as being affected by* ***illegal*** *substance abuse or withdrawal symptoms resulting from prenatal drug exposure*"
- Plan of Safe Care

2010

- Amendment: clarified the definition of substance exposed infant and added **Fetal Alcohol Spectrum Disorder (FASD)**

2016

- Amendment: clarified population requiring a Plan of Safe Care: "*born with and identified being affected by* ~~***illegal***~~ *substance abuse withdrawal symptoms resulting from prenatal drug exposure or Fetal Alcohol Spectrum Disorder*"

Federal law on substance use in pregnancy (2)

Requirements:

1. Identify infants affected by substance abuse, withdrawal or Fetal Alcohol Spectrum Disorder
2. Health care providers notify child protective services
3. Develop a Plan of Safe Care (POSC)
4. State child protective services agency report data to Children's Bureau annually

Goal: To address the needs of infants affected by substance abuse, withdrawal or Fetal Alcohol Spectrum Disorder.

Vermont's approach to CARA/CAPTA

- Focused on continuing to attract pregnant opioid-dependent people into treatment of their OUD rather than pushing them away for fear of DCF involvement.
- Defined separate pathways for DCF reports and CAPTA notifications to minimize involvement of DCF when no child safety concerns are present.
- Updated DCF policy to not accept reports when the sole concern was prenatal use of marijuana.
- Developed a de-identified CAPTA notification pathway to allow aggregate reporting of numbers of substance exposed newborns to the federal Children's Bureau while maintaining family privacy.

What is a CAPTA Notification?

De-identified tracking form sent to DCF for reporting to Children's Bureau.

CAPTA notifications completed by birth hospital staff when:

- MOUD during pregnancy
- Prescribed opioids for pain during pregnancy
- Prescribed benzodiazepines during pregnancy
- Use of marijuana during pregnancy (after 1st trimester)

DCF reports are made when:

- Illegal substances used during 3rd trimester of pregnancy
- Non-prescribed or misuse of prescribed prescription meds in 3rd trimester
- Suspected fetal alcohol spectrum disorder

Vermont CAPTA Notification

INSTRUCTIONS:

Infant exposures to certain substances during pregnancy are tracked by the Vermont Department for Children and Families (DCF) for reporting to the Children's Bureau based on federal law (CAPTA). The use of the prescribed substances listed below and/or marijuana during pregnancy requires the completion of the Vermont Plan of Safe Care (POSC) prior to infant discharge from the hospital and submission of this de-identified CAPTA notification form to DCF. Identifying information such as names, medical record numbers, and dates of birth should not be included on this form. The POSC and de-identified CAPTA notification should be completed by the hospital that discharged the infant.

Please submit via secure fax (802) 241-9060 or scan to AHS.DCFFSDCaptaNotification@vermont.gov
(No cover sheet necessary)

Reminder: A report to the DCF child protection hotline (1-800-649-5285) should be made in these situations:

- Substance use is a concern for child safety
- Use of an illegal substance or non-prescribed prescription medication, or misuse of prescription medication during the third trimester of pregnancy.
- Newborn has a positive confirmed toxicology result for an illegal substance or non-prescribed medication.
- Newborn develops signs or symptoms of withdrawal as the result of exposure to illegal substances, use of non-prescribed medications, misuse of prescribed medication, or due to undetermined exposure.
- Newborn is suspected to have fetal alcohol spectrum disorder, or the pregnant individual had active alcohol use disorder during the third trimester of pregnancy.

For reports that are accepted by DCF, the POSC will be completed by DCF.

Allows tracking of substance exposure(s)

Allows tracking of POSC completion and referrals

Please check the boxes that apply to the current pregnancy:

The pregnant individual was treated by a healthcare provider with:

- ☐ Medications for Addiction Treatment (MAT): Methadone, Buprenorphine, Subutex, Suboxone, Naloxone
- ☐ Prescribed opioids for chronic pain
- ☐ Prescribed benzodiazepines

The pregnant individual used marijuana during pregnancy (use continued after the first trimester):

- ☐ Recreational THC
- ☐ Prescribed THC

Additional exposures:

- ☐ Alcohol Amount if known: _____
- ☐ Nicotine/Tobacco/E-cigarettes Amount if known: _____
- ☐ Other prescribed medications (ex. SSRIs): _____

Please check if any of the following apply:

- ☐ A Plan of Safe Care was completed and was sent to the infant's primary care provider
- ☐ The pregnant individual was engaged in services prior to delivery (ex: counseling, treatment, parenting classes)
- ☐ New referrals were made for services for the infant and/or parents/caregivers after birth

Unique Record Identifier: ☐☐☐☐-☐☐☐☐

(Hospital code followed by last 4 digits of hospital medical record number)

Vermont Plan of Safe Care (POSC)?

- is created with the pregnant individual and other involved caregivers, ideally started during pregnancy and completed prior to birth hospital discharge.
- documents current supports and strengths in addition to areas of needed supports and referrals.
- is shared with the infant's primary care provider after birth and given to the caregiver, but it is NOT shared with DCF unless they are involved for child safety concerns.

Vermont Newborn Plan of Safe Care (POSC)

INSTRUCTIONS
The Plan of Safe Care should be developed with the pregnant individual and other involved caregivers prenatally and completed after the infant is born. The goal of the POSC is to ensure infants and families are connected to supportive services in their communities. The completed POSC should be sent to the infant's primary care provider at hospital discharge to facilitate communication and follow-up of new referrals. It should be scanned into the infant's medical record and the family should also receive a copy.

POSC INDICATION
☐ MAT ☐ Prescribed Opioids ☐ Prescribed Benzodiazepines ☐ Marijuana use (prescribed or recreational after 1st trimester)

DEMOGRAPHIC INFORMATION		
Name of Parent:	Parent's DOB:	EDD:
Name of Infant:	Infant's DOB:	Infant discharge date:
Infant's primary care provider & contact information:		

HOUSEHOLD MEMBERS					
Name	Relationship to Infant	Age	Name	Relationship to Infant	Age

CURRENT SUPPORTS (include emergency childcare contact and other support people)		
Name	Role	Contact information

STRENGTHS AND GOALS *(ex: recovery, housing, parenting, smoking cessation, breastfeeding)*

SERVICES, SUPPORTS, and REFERRALS			
Infant Supports			
	Contact information	**Status**	
Nurse home visiting (Home Health & Hospice, VNA, Children's Integrated Services Strong Families Vermont)		☐ Currently Receiving ☐ New referral placed	☐ Discussed ☐ Not applicable
Children's Integrated Services: Early Intervention		☐ Currently Receiving ☐ New referral placed	☐ Discussed ☐ Not applicable
Help Me Grow	Phone: 2-1-1 extension 6 or Online: https://helpmegrowvt.org/form/referral-form	☐ Currently Receiving ☐ New referral placed	☐ Discussed ☐ Not applicable
Pediatric specialist referral (NeoMed clinic)		☐ Currently Receiving ☐ New referral placed	☐ Discussed ☐ Not applicable

Vermont POSC (continued)

Caregiver Supports		
	Contact information	**Status**
Medications for Addiction Treatment (MAT)	**	☐ Currently Receiving ☐ Discussed ☐ New referral placed ☐ Not applicable
Mental Health Counseling	**	☐ Currently Receiving ☐ Discussed ☐ New referral placed ☐ Not applicable
Substance Use Counseling	**	☐ Currently Receiving ☐ Discussed ☐ New referral placed ☐ Not applicable
Community Empaneled Team (ex. ChARM)	**	☐ Currently Receiving ☐ Discussed ☐ New referral placed ☐ Not applicable
Recovery Supports (ex. Recovery coaching, 12-step group)		☐ Currently Receiving ☐ Discussed ☐ New referral placed ☐ Not applicable
Case Management		☐ Currently Receiving ☐ Discussed ☐ New referral placed ☐ Not applicable
Smoking Cessation		☐ Currently Receiving ☐ Discussed ☐ New referral placed ☐ Not applicable
Parenting Supports		☐ Currently Receiving ☐ Discussed ☐ New referral placed ☐ Not applicable
Financial Supports (WIC, Fuel, Reach Up)		☐ Currently Receiving ☐ Discussed ☐ New referral placed ☐ Not applicable
Housing Supports		☐ Currently Receiving ☐ Discussed ☐ New referral placed ☐ Not applicable
Childcare Resources (Children's Integrated Services: Specialized Child Care)		☐ Currently Receiving ☐ Discussed ☐ New referral placed ☐ Not applicable
Transportation		☐ Currently Receiving ☐ Discussed ☐ New referral placed ☐ Not applicable
Legal Assistance		☐ Currently Receiving ☐ Discussed ☐ New referral placed ☐ Not applicable
Other		☐ Currently Receiving ☐ Discussed ☐ New referral placed ☐ Not applicable

**confidentiality must be protected, parent/caregiver may choose to disclose contact information or leave blank

DCF POSC

DCF POSC Website

Frequently Asked Questions:

- CAPTA notification
- Vermont POSC
- THC use in pregnancy

POSC handout for families

Vermont POSC Parent Handout

Vermont Plan of Safe Care for Families Handout (PDF)

Vermont Plan of Safe Care for Families

What is a Plan of Safe Care?

The Plan of Safe Care is a document created with your help listing current supports and strengths your family has and any new community resources or referrals you may need after your baby is born. This plan will help your family and the infant's primary care provider communicate and be sure you have all the supports and services you need.

Who needs a Plan of Safe Care?

In Vermont, a Plan of Safe Care is developed when certain prescription medications or substances are used during pregnancy including:

- Prescribed medications for addiction treatment (MAT)
- Prescribed opioids for chronic pain
- Prescribed benzodiazepines
- Prescribed or recreational marijuana use continuing after the first trimester

What will be in your plan?

- Information about your current supports and services
- Information about new resources or referrals placed after the baby is born.
  Examples include: home health/nurse home visiting, parenting and recovery supports, financial or housing

Preparing families: What will happen after birth?

Birth hospital staff will:

- Support families in caring for their infant
- Encourage and assist with breastfeeding
- Monitor for signs and symptoms of NAS/NOWS using tools such as the Eat, Sleep, Console Care Tool for at least 96 hours
- Complete the Vermont Plan of Safe Care with the family and send to the infant's primary care provider at hospital discharge

Supporting Caregivers

- Care should be multidisciplinary, collaborative, non-judgmental, and based on the identified needs of the infant-mother dyad [1]
- Symptoms of NAS can make infants more difficult to care for and console. Caregivers may need additional support and positive reinforcement from follow-up services [2]
- A transition to home plan can ensure that infants with NAS are discharged to caregivers who are prepared and responsive to the infant's needs [3]

Supporting Recovery

Peer support services for postpartum women with OUD

- Postpartum women reported overall positive experiences receiving peer support services during and after pregnancy. [4]
- Incorporating recovery coaches or peer mentors with lived experience can lessen shame and stigma in mothers [5]

Reducing Stigma

- Stigma around NAS and substance use disorders in general is a significant barrier to treatment for pregnant people. Many do not self-disclose their drug use during pregnancy due to stigma, complicating the treatment process [6]

- Public Awareness campaigns can educate communities that substance use disorder is a disease, and treatment and recovery supports are available. Decreasing stigma can also encourage individuals with substance use disorders to seek help [5]

Early communication and clear messaging is key!

Combat fear with facts:

- Reinforce that MOUD is the best treatment for OUD in pregnancy and is SAFE. Stopping MOUD puts both the pregnant person and baby at risk.
- In VT DCF does not get involved unless there are child safety concerns- MOUD or THC use alone do NOT trigger involvement .

Empower pregnant people to ask questions and seek answers:

- What will it be like in the hospital after the baby is born?
- Will my baby have withdrawal? What are the symptoms? How long does it last? How is it treated?

Fight stigma with TRUTH:

Visit the New DCF POSC Website

Email: AHS.DCFFSDCAPTA@vermont.gov

Where can I get more information?

Email me: michelle.shepard@med.uvm.edu

References

1. McQueen, K., & Murphy-Oikonen, J. (2016). Neonatal Abstinence Syndrome. New England Journal of Medicine, 375(25), 2468–2479. https://doi.org/10.1056/nejmra1600879

2. Association of State and Territorial Health Officials. (2014). Neonatal Abstinence Syndrome: How States Can Help Advance the Knowledge Base for Primary Prevention and Best Practices of Care. Retrieved from http://www.astho.org

3. Bordelon, C., Wood, T., Johnson, M., & Fogger, S. (2020). Transition home: Safe plan of care for infants with a history of neonatal abstinence syndrome. Journal of Addictions Nursing, 31(1), 60-65.

4. Fallin-Bennett, A., Elswick, A., & Ashford, K. (2020). Peer support specialists and perinatal opioid use disorder: Someone that's been there, lived it, seen it. Addictive Behaviors, 102, 106204. https://doi.org/10.1016/j.addbeh.2019.106204

5. U.S. Department of Health and Human Services, Health Resources and Services Administration. (2018). HRSA's Home Visiting Program: Supporting Families Impacted by Opioid Use and Neonatal Abstinence Syndrome. Rockville, Maryland: U.S. Department of Health and Human Services.

6. Thigpen, J. & Melton, S. (2014). Neonatal Abstinence Syndrome: A Challenge for Medical Providers, Mothers, and Society. The Journal of Pediatric Pharmacology and Therapeutics: JPPT, 19(3), 144–146.