

## Module 9: Strategies for Improving Maternal and Infant Health Related to Opioid Use



# Module Overview

- **Statistics**
- **Presentation of main learning objectives:**
  - Recognize the importance of evidence-based interventions to treat opioid use disorder in pregnancy for both mother and infant.
  - STIGMA BULLET
  - Determine strategies to assess opioid use disorder in pregnant and postpartum women and provide referral to assessment and treatment.
  - Explain care considerations for pregnant and postpartum women, and infants born with neonatal abstinence syndrome (NAS)/neonatal opioid withdrawal syndrome (NOWS).
- **Case Scenarios**
- **Summary and Review**
- **Post-Evaluation**

A photograph of a woman with dark hair, smiling and holding a newborn baby wrapped in a white cloth. The image is partially obscured by a dark blue overlay containing text.

## Module 9

# Introduction: Background on Opioid Use Disorder in Pregnant Women



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# National Statistics

- In the United States in 2020, **19,970 females** died from opioid overdose.
- According to 2019 self-reported data, about **7% of women** reported using prescription opioid pain relievers during pregnancy.
- The number of women with opioid-related diagnoses documented at delivery **increased by 131%** from 2010 to 2017.
- The number of babies born with **Neonatal Abstinence Syndrome (NAS) increased by 82%** nationally from 2010 to 2017. Increases were seen for nearly all states and demographic groups.
- The 2018 national NAS rate was **6.8 per 1,000** live births

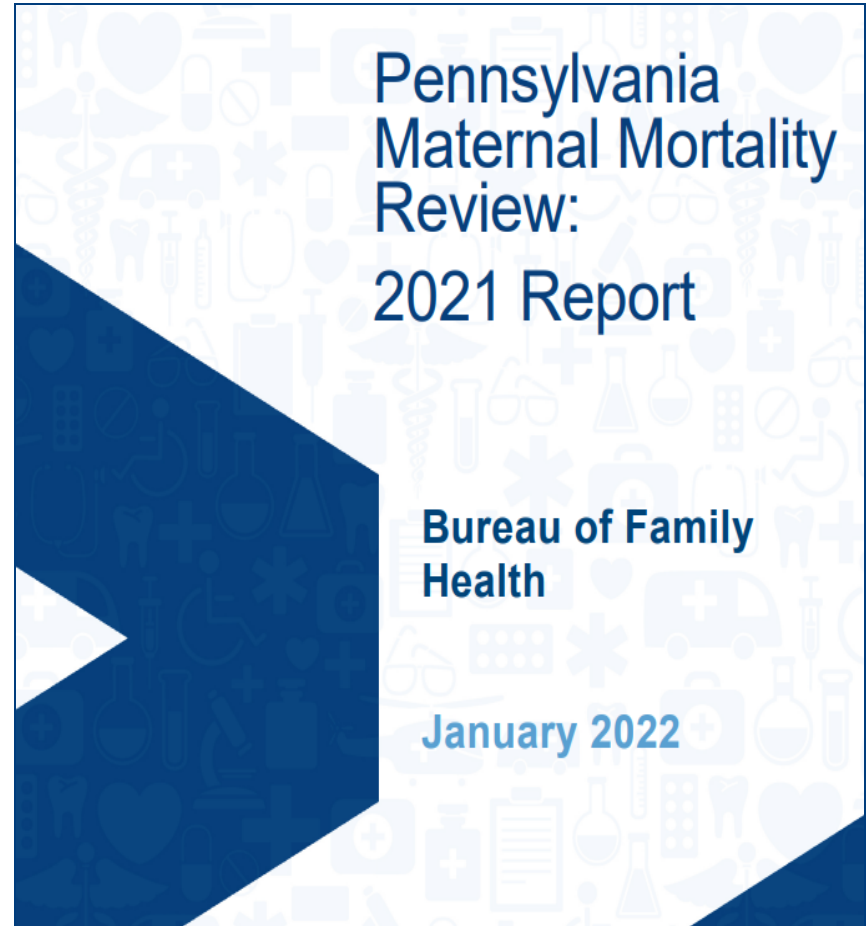
References: 3, 6

# Maternal Mortality in Pennsylvania

- In 2018, there were 135,677 reported live births, 28,240 reported abortions, and 1,165 reported fetal deaths in Pennsylvania.
- Of the 135,677 pregnancies, 111 resulted in maternal death
- 44 death cases were reviewed and showed that **34%** of maternal pregnancy deaths were related to substance use disorder.
  - 7 % were listed as “probably”

## Source:

<https://www.health.pa.gov/topics/healthy/Pages/Maternal-Mortality.aspx>



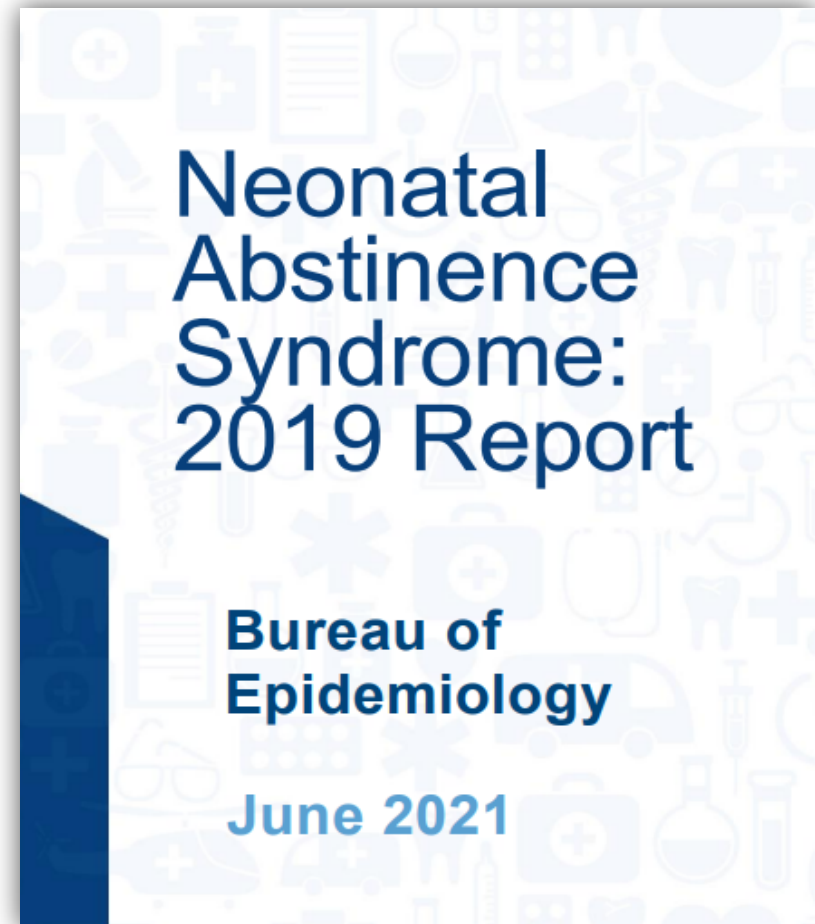


# Pennsylvania Statistics

- The Pennsylvania 2019 NAS rate was **11.9 per 1,000** newborn hospitalizations
- In 2019, there were **1,608 cases of NAS** reported.
- Among infants with a positive lab result:
  - 82% tested positive for opioids
  - 69% tested positive for drugs commonly associated with Medication Assisted Treatment (MAT)
  - 20% tested positive for opiates, oxycodone, or fentanyl

Source:

<https://www.health.pa.gov/topics/Documents/Opioids/2019%20NAS%20REPORT.pdf>



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References: 2  
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## Module 9

### Objective 1

# Stigma Reduction



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# Stigma

## Public Stigma

Society's negative attitudes toward a group of people creating an environment where individuals feel unwelcomed, judged, and/or blamed

## Structural Stigma

Systems-level discrimination caused by institutional policies and/or dominant cultural norms

## Self-Stigma

Where individuals accept societal stereotypes and experience reduced self-esteem and self-efficacy

## Stigmas manifest as discrimination

*“Stigma affects and...dictates how policies are created, how healthcare is provided, and how people perceive treatment...These beliefs entrench deep feelings of exclusion and shame for individuals with a SUD...fueling negative outcomes...that make SUD more difficult to address.”*



# Stigma and Healthcare

- The system is not designed to support individuals with SUDs
- Attitudes toward individuals with SUDs tend to decline during residency training and negatively affect patient care
- Access to treatment and care is even more challenging for birthing people, yet focusing on them and their babies is vital to the health and long-term stability of all people, children, family units, and communities.

**BUT...**

**Attitudes toward individuals with SUDs improved after taking an online training module**

# Stigma and Reproductive Healthcare

- According to the Women's Brain Project 10% of pregnant women and 13% of women who have just given birth struggle with mental health disorders.
- NIDA estimates that about 5% of pregnant women use one or more addictive substances.
- Both mental health and substance use disorders are risk factors for facing stigma in a healthcare setting, in addition to compounding risk factors based on gender, race, and other identifiers.
- Without taking care of mothers and birthing people as they address their own substance use, we run the risk of furthering the addiction crisis for generations to come.

# An Example...

Words shape how we view people and how we treat them

**“an individual with substance use disorder”**

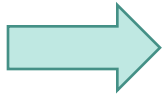
**VS**

**“substance abuser”**

Clinicians more likely to say the patient was personally responsible for their illness and support punitive action.

# Recommended Language and Rationale

Abuser, Addict,  
Druggie, User,  
Junkie



Person with a substance  
use disorder ("person with  
opioid/alcohol use disorder" if  
relevant, "patient" if in a clinical  
setting)



Neutral, non-judgmental language.  
Several studies compare "abuser/  
abuse" to "person with substance  
use disorder" and confirm that  
person-first language is less  
stigmatizing

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Drug addicted  
infant, addicted  
baby, born  
addicted



Baby with neonatal opioid  
withdrawal/ neonatal  
abstinence syndrome;  
related: newborn exposed to  
substances



Person-first, neutral language  
doesn't put moral judgment on the  
mother, and keeps the focus on  
clinical solutions

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Dirty

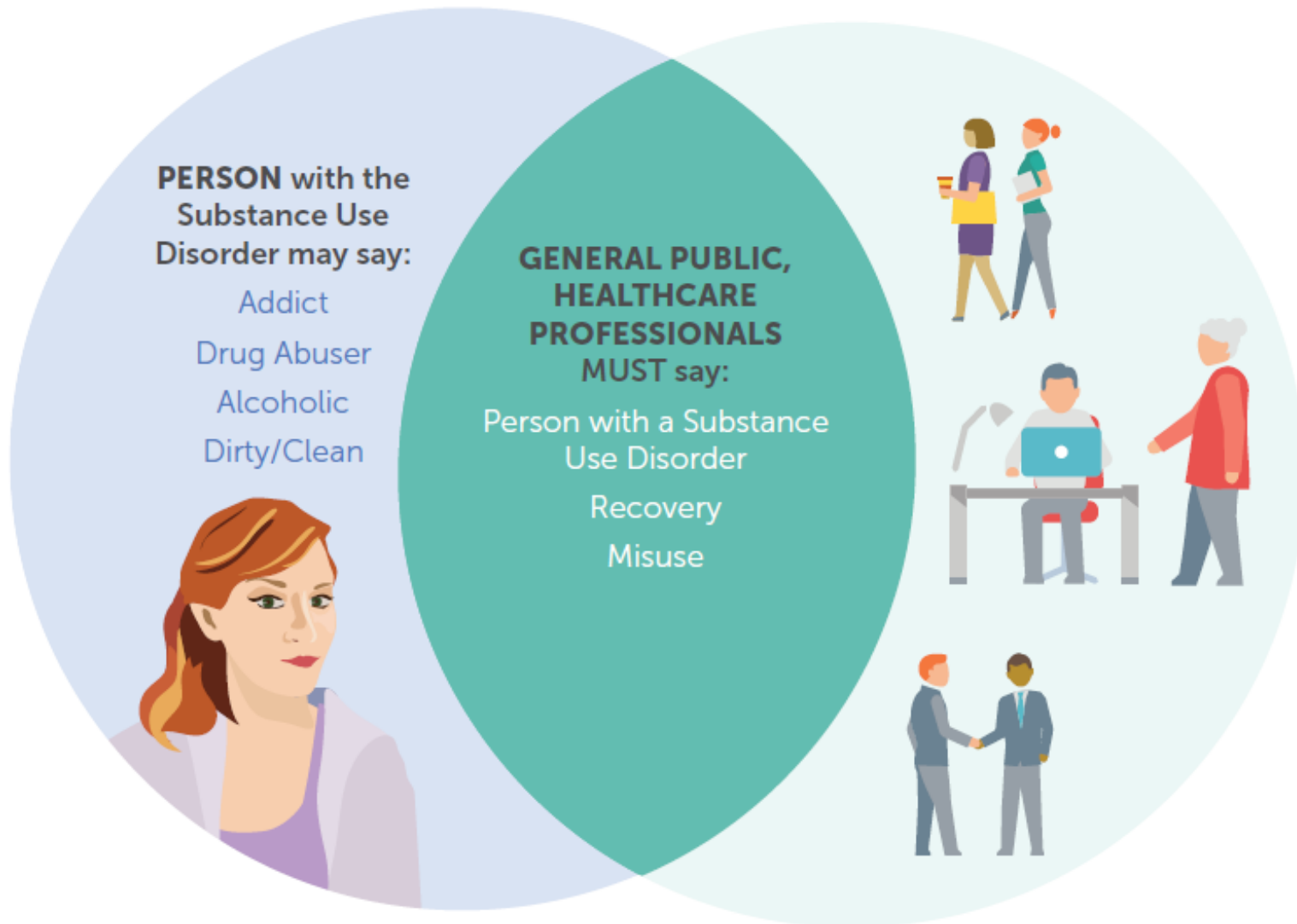


Person who tests positive for  
substance use



Dirty/clean is associated with filth,  
not a medical condition. Invokes  
punitive bias and shame.

# Changing Language to Improve Care



# Let's Review...What Can We Do?

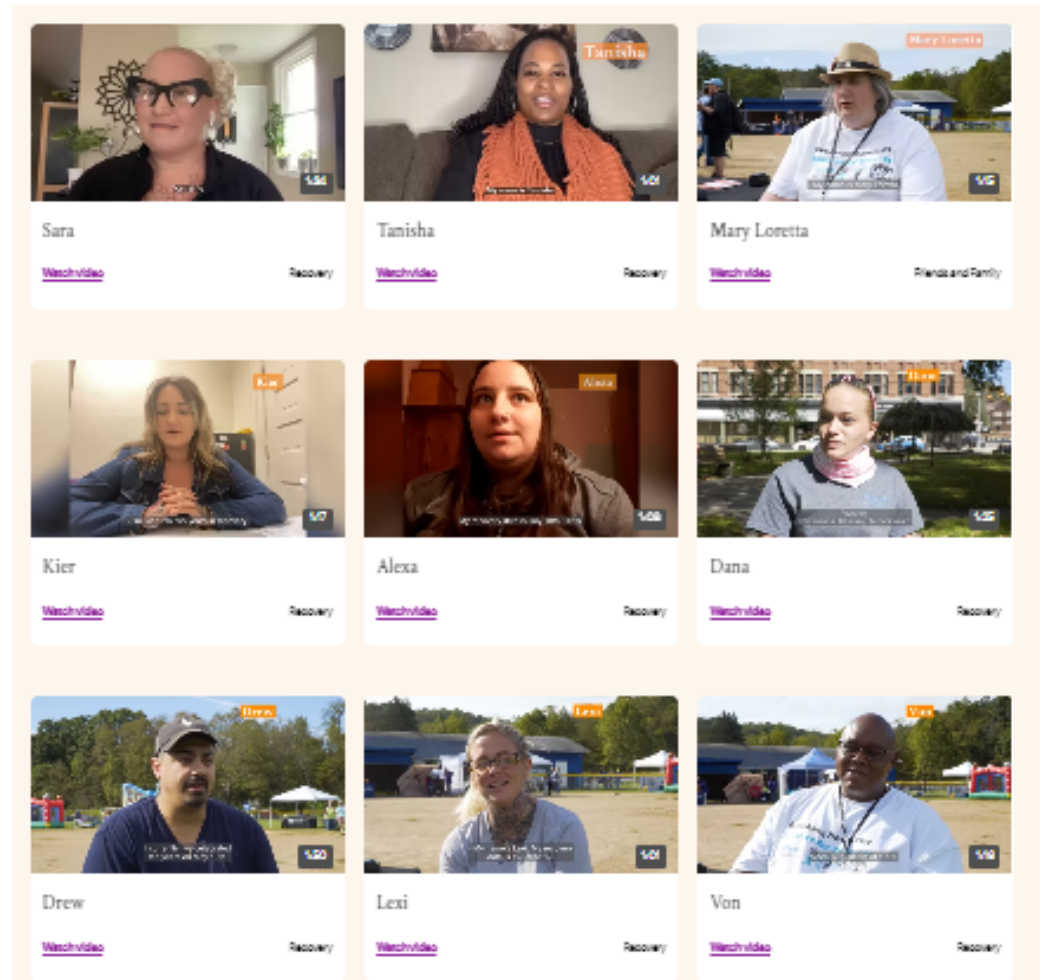
- Adjust our language
- Learn the facts
- Support our family, friends, and community – see the whole person
- Listen to people when they're sharing their story
- Speak out when we hear something stigmatizing; challenge misconceptions and stereotypes



# PA State Campaign: Life Unites Us



- State campaign fighting addiction stigma in PA
- Partnership between DDAP, Penn State Harrisburg, Shatterproof, and PGP
- Story Library: Giving a platform to PA residents affected by the addiction epidemic. Highlights need to replace stigma with support and understanding



## Module 9

### Objective 2

# Clinical Guidelines for Treating Pregnant and Parenting Women with Opioid Use Disorder and Their Infants

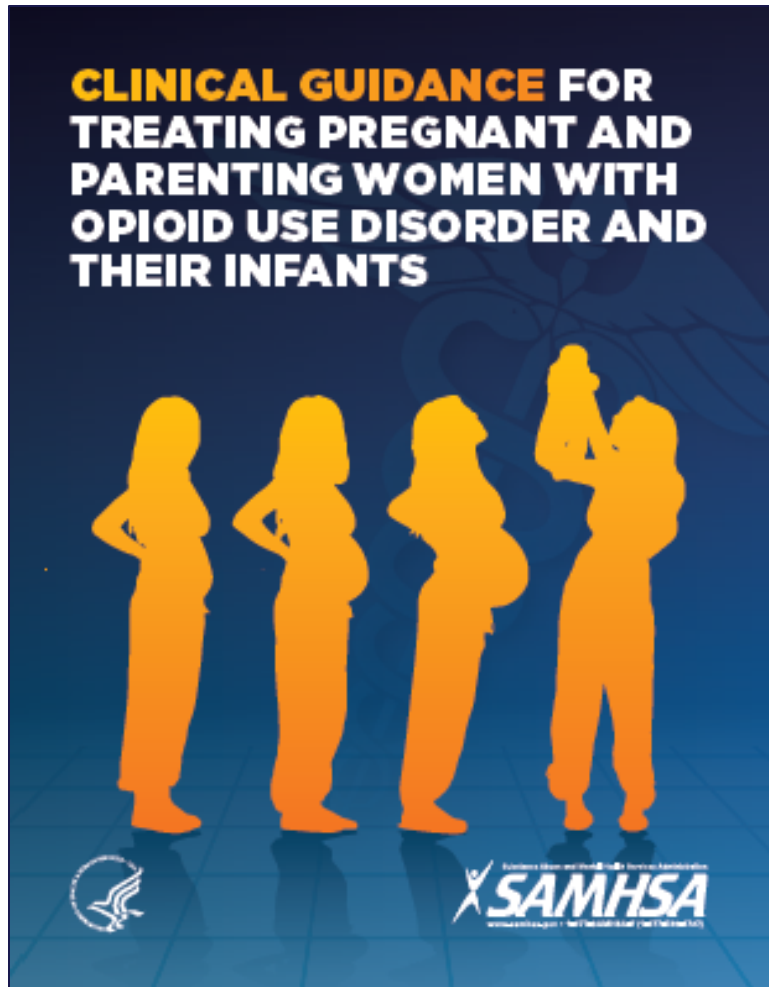


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## Objective 2: Opioid Use Disorder in Pregnant and Postpartum Women



## Objective 2: Opioid Use Disorder in Pregnant and Postpartum Women

### Pennsylvania Guideline Organization

The Pennsylvania Guideline addresses stabilization, treatment, and recovery management for opioid use disorder (OUD) during pregnancy.

#### I. Use of Methadone for the Treatment of OUD in Women Who Are Pregnant

Methadone Induction  
Maintenance  
Intrapartum Dosing  
Intrapartum and Postpartum Pain Management  
Postpartum Dosing

#### II. The Use of Buprenorphine for the Office-Based Treatment of Opioid Use Disorder in Women Who Are Pregnant

9. Buprenorphine Induction  
10. Maintenance  
11. Intrapartum Dosing  
12. Intrapartum and Postpartum Pain Management  
13. Postpartum Dosing

## Objective 2: Opioid Use Disorder in Pregnant and Postpartum Women

### ***SAMHSA Clinical Guide Purpose***

- Facilitate treatment of pregnant and parenting women with OUD and their infants.
- Dual purpose:
  - Increase the number of professionals who can offer care to women with OUD who are pregnant and to their infants
  - Standardize this care throughout the United States



## Objective 2: Opioid Use Disorder in Pregnant and Postpartum Women

### ***SAMHSA Clinical Guide Overarching Recommendations***

- Buprenorphine and methadone are the safest medications for managing OUD during pregnancy.
- Medically supervised withdrawal is not recommended during pregnancy.
- Transitioning from methadone to buprenorphine or from buprenorphine to methadone during pregnancy is not recommended.
- Breastfeeding is recommended for women on buprenorphine and methadone.
- NAS should not be treated with dilute tincture of opium.



## Objective 2: Opioid Use Disorder in Pregnant and Postpartum Women

### SAMHSA *Clinical Guide* Organization

The *Clinical Guide* consists of 16 factsheets that are organized into 3 sections: Prenatal Care (Factsheets #1–8); Infant Care (Factsheets #9–13); and Maternal Postnatal Care (Factsheets #14–16).

#### I. Prenatal Care

1. Prenatal Screenings and Assessments
2. Initiating Pharmacotherapy for Opioid Use Disorder
3. Changing Pharmacotherapy During Pregnancy
4. Managing Pharmacotherapy Over the Course of Pregnancy
5. Pregnant Women With Opioid Use Disorder and Comorbid Behavioral Health Disorders
6. Addressing Polysubstance Use During Pregnancy
7. Planning Prior to Labor and Delivery
8. Peripartum Pain Relief

#### II. Infant Care

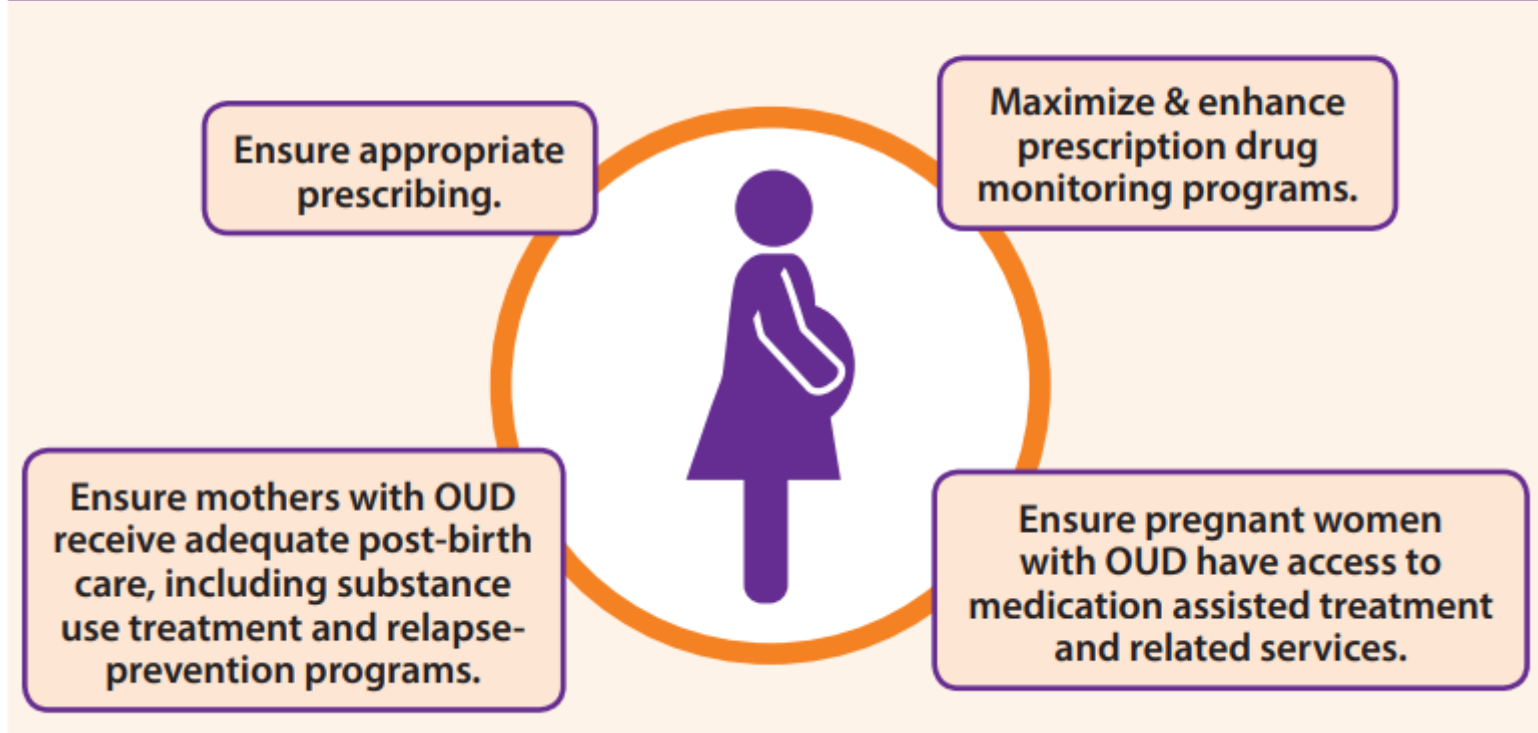
9. Screening and Assessment for Neonatal Abstinence Syndrome
10. Management of Neonatal Abstinence Syndrome
11. Breastfeeding Considerations for Infants at Risk for Neonatal Abstinence Syndrome
12. Infant Discharge Planning
13. Early Interventions Strategies and Developmental Assessments

#### III. Maternal Postnatal Care

14. Adjusting Pharmacotherapy Dose Postpartum
15. Maternal Discharge Planning
16. Maternal Return to Substance Use

## Objective 2: Opioid Use Disorder in Pregnant and Postpartum Women

### Strategies for Addressing OUD among Pregnant Women



Source: <https://www.cdc.gov/reproductivehealth/opioid-use-disorder-pregnancy/pdf/MMWR-Opioids-Use-Disorder-Pregnancy-Infographic-h.pdf>

## Module 9

### Objective 3

# Barriers to Care and Mitigation Strategies

## Objective 3: Opioid Misuse Among Women

- An analysis of 2019 self-reported survey data found:
  - 6.6% of woman reported prescription opioid use during pregnancy
    - 21.2% reported misuse
    - 27.1% wanted or needed to cut down or stop using
    - 31.9% reported NOT receiving counseling about how use could affect an infant
  - Among the women who used prescription opioids:
    - 91.3% reported receiving the opioids from a health care provider
    - 8.9% from a source other than a health care provider (e.g., friend or family member)
    - 4.3% from other/undetermined sources

Source: <https://www.cdc.gov/mmwr/volumes/69/wr/mm6928a1.htm#T2> down

## Objective 3: Complexities Among Women with OUD

- The course of opioid use initiation to OUD is a complex one that may include
  - Childhood physical and/or emotional abuse and/or neglect
  - Living in a culture that allows gender inequality/discrimination
  - Chronic stress
  - Psychiatric co-morbidities
  - Poor nutrition
  - Intimate partner abuse
  - Intergenerational substance use
  - Economic challenges
  - Exposure to environmental toxins

## Objective 3: Barriers to Care

### Barriers to Care

- **Social determinants of health** including transportation, lack of funds to pay for services, limited resources, etc.
- Fear of being incarcerated for illicit drug use or for exposing their fetus to illicit drugs
- Fear of losing custody of their children
- Shame and fear of being judged
- Daycare

### Social Determinants of Health



Social Determinants of Health  
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# Objective 3: Prenatal Screening and Assessment

## Screening for Opioid Use Disorder


All women should be screened for opioid use disorder during their first prenatal appointment. Examples of validated assessment tools include:

- ☞ [Parents, Partners, Past and Pregnancy \(The 4Ps\)](#)
- ☞ [Parents, Peers, Partner, Pregnancy, and Past \(The 5Ps\)](#)
- ☞ [CRAFFT](#)
- ☞ [Tobacco, Alcohol, Prescription Medication, and Other Substance Use Tool \(TAPS\)](#)

PDMP querying can be performed to check for a history of and current opioid prescriptions to ensure safety and treatment during pregnancy.


SECTION 1  
FACTSHEET #  
**1**

**PRENATAL SCREENINGS  
AND ASSESSMENTS**



**CLINICAL SCENARIO**  
A pregnant woman with opioid use disorder (OUD) presents for care.

**CLINICAL ACTION STEPS**  
**Screenings**  
When a pregnant woman presents requesting prenatal care and help with her substance use disorder, conduct a careful, empathetic, and nonjudgmental interview with her that lets her know that all new patients are asked the same questions about substance use. Because polysubstance use is common, a validated screening instrument for other substance use may also be given to the patient for self-completion and reviewed by a healthcare professional. This screening should be conducted in a clinically appropriate and therapeutic manner. To ensure that information is gathered and addressed effectively, screening may be part of a formal **screening, brief intervention, and referral to treatment (SBIRT)** protocol such as that created by the Substance Abuse and Mental Health Services Administration (SAMHSA).  
**Prescription Drug Monitoring Program (PDMP)**  
A review of data in the state's PDMP to identify all reported medications that have been prescribed to the woman needs to be included as part of the initial visit and rechecked over the course of the care.  
**Medical, Social, and Legal Consequences**  
Pregnant women with OUD should receive counseling and education on the medical and social consequences of pharmacotherapy for OUD, continued use of legal and illicit substances while pregnant, and withdrawal from opioids while pregnant with inherent risks to mother and fetus or relapse.  
Owing to differing state, county and local laws and regulations, there is no universal approach to assessing the social and legal consequences of legitimate pharmacotherapy for OUD or other substance use during pregnancy.



## Objective 3: Toxicology Screens

### Toxicology Screens

#### **Common laboratory tests for pregnant women with possible SUD include:**

- Urine toxicology screen for opioids and illicit drugs used in the community that includes confirmatory testing
- Urine screen for alcohol that includes confirmatory screening
- Screen for HIV, hepatitis B and C, and sexually transmitted infections

Reference: 8

## Objective 3: Mitigation Strategies and Referral for Assessment

# SBIRT and Motivational Interviewing

**Motivational interviewing:** "A collaborative conversation style for strengthening a person's own motivation and commitment to change."

**SBIRT:** Screening, Brief Intervention, Referral to Treatment

## Objective 3: Mitigation Strategies and Referral for Assessment

*For more on SBIRT and motivational interviewing techniques, see*  
**Module 6: Approaches to Addressing Substance Use Disorder with Patients Identified by the PDMP.**



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# Objective 3: Warm Handoff Between OB and Addiction Providers



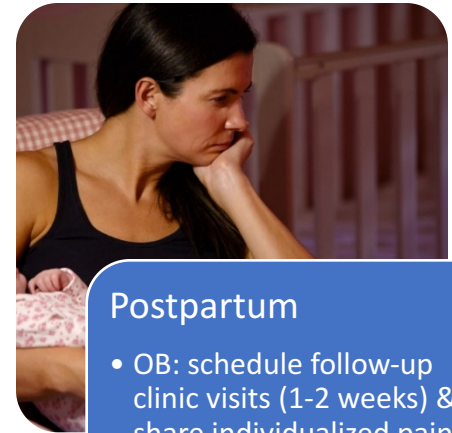
## Prenatal

- OB: formulate peripartum pain management plan with anesthesia
- Addiction: confirm pharmacotherapy dosing & plan for continuation



## Intrapartum

- OB: share peripartum pain management plan with nursing and other providers
- Addiction: recommend continuation of pharmacotherapy at same dose through labor & delivery



## Postpartum

- OB: schedule follow-up clinic visits (1-2 weeks) & share individualized pain medication regimen
- Addiction: confirm receipt of pharmacotherapy prescription at discharge & schedule early interval follow-up (1 week)



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## Objective 3: Mitigation Strategies and Referral for Assessment

### Pennsylvania Resources:

- [Single County Authorities](#)
- [Centers of Excellence](#) (for opioid use disorders)
- [Pennsylvania Coordinated Medication Assisted Treatment \(PacMAT\)](#)

### Online Resources:

- [Pregnancy and Substance Use: A Harm Reduction Toolkit](#)
- [Maternal Mental Health Hotline](#)
  - (HRSA): 1-833-9-HELP4MOMS



# Clinical Scenario #1

## Patient: Jane Williams

- 30 years old
- 9 weeks pregnant
- Presents for her first prenatal appointment at a new ObGyn office
  - Medical records received from PCP
  - Medication list includes oxycodone

Source: <https://www.cdc.gov/opioids/providers/training/pregnancy.html>

# Clinical Scenario-Knowledge Check 1

**How do you think the provider should respond in this case? Select the best answer.**

- A. Ask the patient how her current dose is working and whether she needs a refill.
- B. Inform the patient that it would be irresponsible to continue taking opioids for chronic pain now that she is pregnant and tell her she must stop immediately.
- C. Ask the patient questions about her dosage and how frequently she takes the medication, as well as what other therapies she may have tried.**

## Clinical Scenario-Knowledge Check 2

**Select the best answer. Screening for substance use disorder in pregnancy should be:**

- A. Selective, based on risk factors
- B. Universal and done at the first prenatal visit**
- C. Part of every prenatal visit
- D. Avoided, as it may cause stigma

Source: <https://www.cdc.gov/opioids/providers/training/pregnancy.html>

## Clinical Scenario-Knowledge Check 3

**Following a positive screen for OUD, what actions should be taken? Select all that apply:**

- A. Use a warm handoff for referral to formal assessment and treatment
- B. Inform the patient they need to seek treatment before receiving prenatal care
- C. Provide regular prenatal care and education
- D. Begin discussing plans for labor pain management and address barriers to healthy outcomes

Source: <https://www.cdc.gov/opioids/providers/training/pregnancy.html>



## Module 9

### Objective 4

# Pharmacotherapy for the Pregnant Woman with Opioid Use Disorder

## Objective 4: Pharmacotherapy for the Pregnant Woman with Opioid Use Disorder

### ***SAMHSA Clinical Guide Key Messages***

- When taken as prescribed, both methadone and buprenorphine are safe and effective treatment options during pregnancy.
- The benefits of pharmacotherapy for OUD during pregnancy outweigh the risks of untreated OUD.
- Medically supervised withdrawal is *not* recommended for pregnant women with OUD.
- Increased or split dosing may be required in the third trimester for pregnant women being treated with methadone or buprenorphine.

## Objective 4: Standards of Care and Treatment for Opioid Use Disorder

**Opioid agonist pharmacotherapy is the recommended treatment for pregnant women.**

Considerations	Buprenorphine	Methadone
Starting Dose	2-4mg	20-30mg
Target Dose	Daily, 16mg with regular assessment of response to tx	Daily, 18-120mg with regular assessment of response to tx
Interval at which dose may be increased	Daily with patient assessment	3 days with patient assessment

Reference: 8

## Objective 4: Standards of Care and Treatment for Opioid Use Disorder

Comorbid Behavioral Health Disorders and Polypharmacy

- ✓ Methadone Interaction Checker
- ✓ Buprenorphine Interaction Checker



## Objective 4: Standards of Care and Treatment for Opioid Use Disorder

### Peripartum Pain Relief

**Labor pain management medications** include:

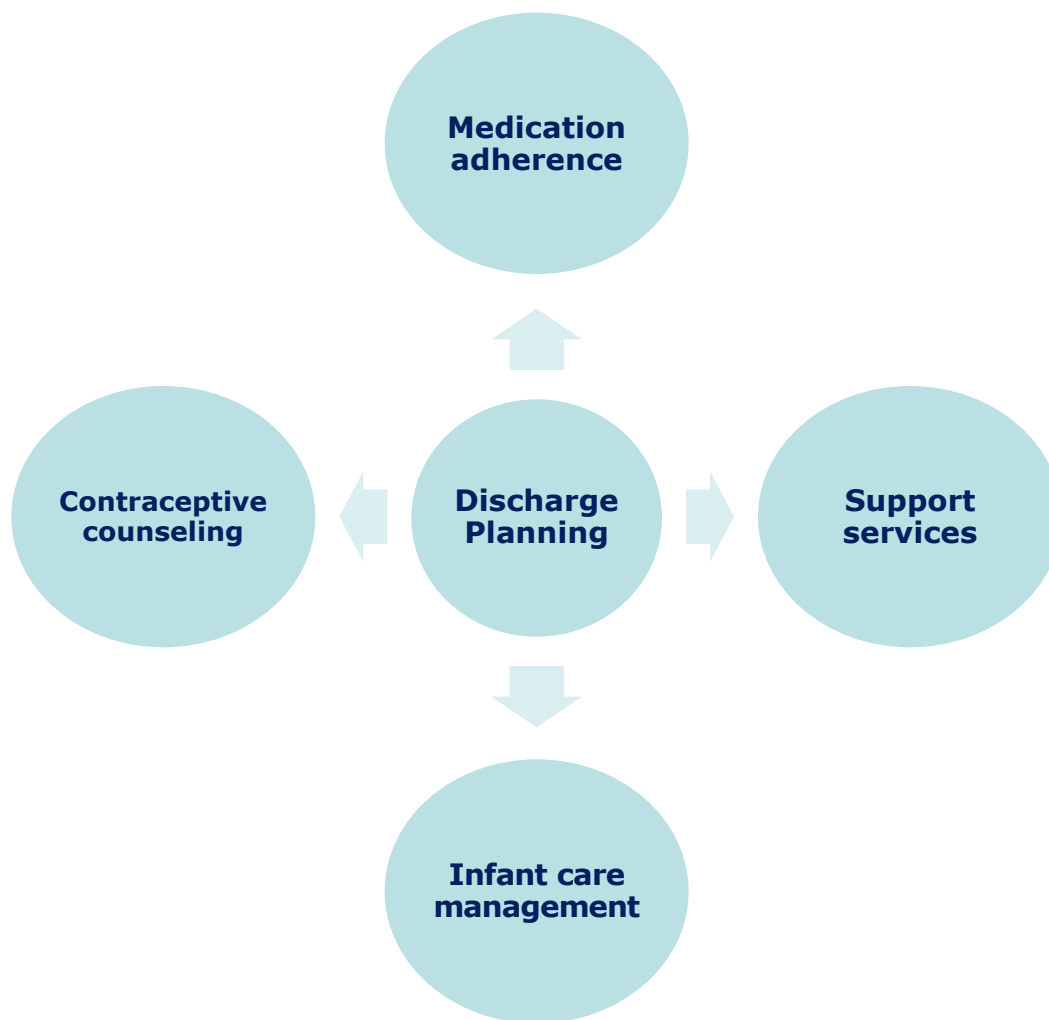
- Epidural/spinal anesthesia
- Short-acting opioid analgesics

**Contraindicated medications** include butorphanol, nalbuphine, and pentazocine

Alternate pain management techniques:

- Prenatal education
- Breathing exercises
- Distraction techniques
- Labor positioning

## Objective 4: Standards of Care and Treatment for Opioid Use Disorder



## Objective 4: Standards of Care and Treatment for Opioid Use Disorder

### Act 54

Act 54 requires all healthcare professionals, including those involved in the delivery or care of an affected infant or encountering an infant up to age one outside a hospital setting, to notify the Pennsylvania Department of Human Services (DHS) so that a Plan of Safe Care can be developed.

#### **Plans of Safe Care:**

<https://www.dhs.pa.gov/KeepKidsSafe/About/Pages/Plans-of-Safe-Care.aspx>

**Self-Service Portal:** <http://www.compass.state.pa.us/cwis>

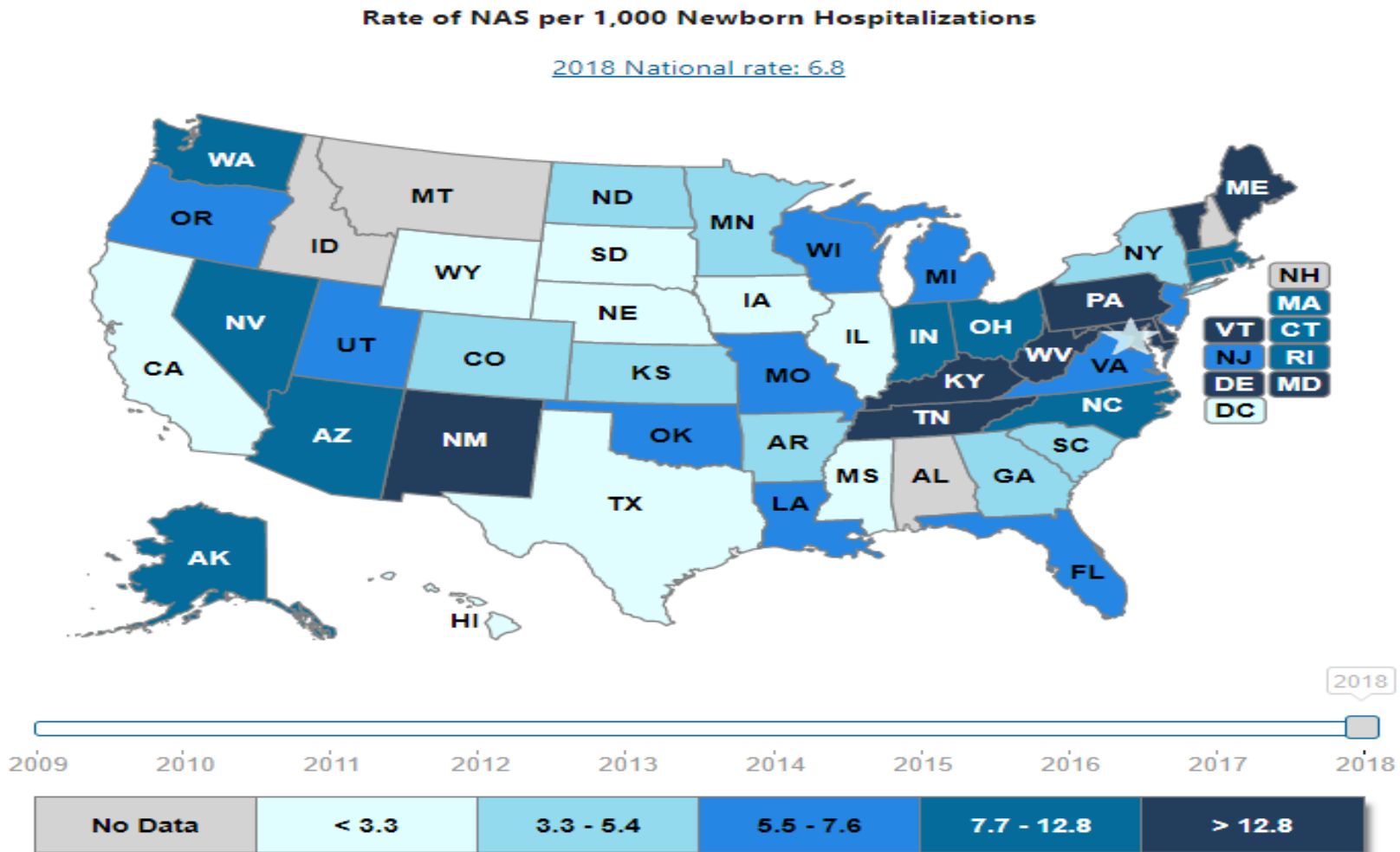
**ChildLine:** 1-800- 932-0313

## Module 9

### Objective 5

# Infant Care

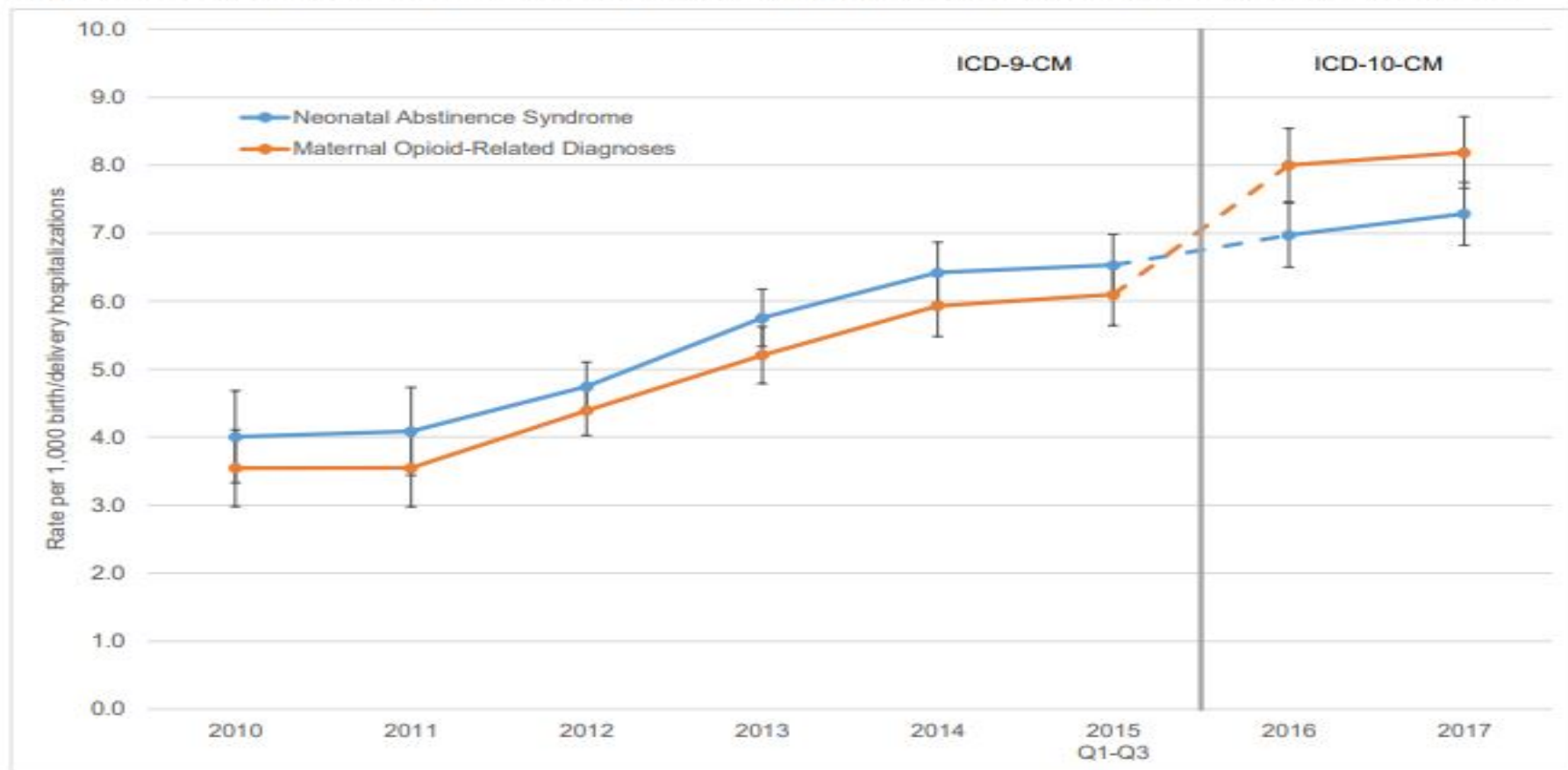
# Neonatal Abstinence Syndrome (NAS) Among Newborn Hospitalizations



SOURCE: <https://www.hcup-us.ahrq.gov/faststats/NASMap>

# Neonatal Abstinence Syndrome (NAS) Among Newborn Hospitalizations

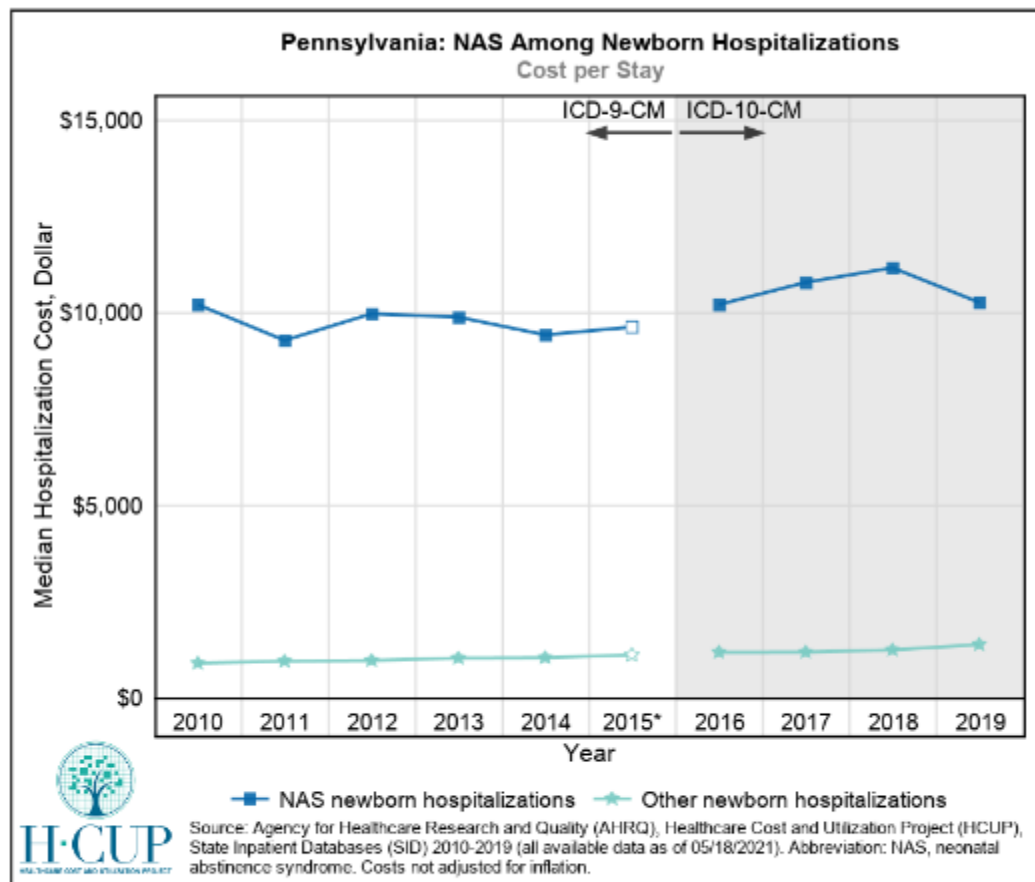
eFigure 1. Neonatal Abstinence Syndrome and Maternal Opioid-Related Diagnoses Rates per 1,000, 2010-2017



Source: Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project, National Inpatient Sample, 2010-2017

**SOURCE:** [Neonatal Abstinence Syndrome and Maternal Opioid-Related Diagnoses in the US, 2010-2017](#)

# Neonatal Abstinence Syndrome (NAS) Among Newborn Hospitalizations - COST



*\*2015 values are based on the first three quarters of data using ICD-9-CM coding.*

- Statistics on cost (Dr G TO PULL)

**Source:** <https://www.hcup-us.ahrq.gov/faststats/NASServlet?radio-2=on&location1=US&characteristic1=02C11&location2=PA&characteristic2=02C11&expansionInfoState=hide&dataTablesState=hide&definitionsState=hide&exportState=hide>

## Objective 5: Infant Care Guidelines

### ***SAMHSA Clinical Guide Key Messages***

- Infants exposed to opioid agonists and partial agonists in utero are prone to display withdrawal symptoms.
- NAS is an expected and treatable outcome following in utero exposure to opioids.
- Nonpharmacological interventions should be initiated to help soothe infants with NAS.
- Pregnant women with OUD should be encouraged to breast feed when possible.
- Pharmacotherapy is thought to have minimal long-term developmental impacts on children compared with untreated OUD.



# Neonatal Abstinence Syndrome (NAS)


- **Neonatal Opioid Withdrawal Syndrome (NOWS)** (a subgroup of NAS)
- Drug withdrawal syndrome in neonates that may result from chronic maternal opioid use during pregnancy
- Occurs in approximately 30-80% of infants born to women taking opioid agonist therapies
- Symptoms
  - Irritability
  - High-pitched cry
  - Poor sleep
  - Uncoordinated sucking reflexes that lead to poor feeding
- [Neonatal Abstinence Syndrome Family Guide Tool Kit](#)

# Objective 5: Screening and Assessment Tools

## Screening for **NAS/NOWS**


SECTION 2  
FACTSHEET #  
**9**

**SCREENING AND  
ASSESSMENT FOR  
NEONATAL ABSTINENCE  
SYNDROME**



**CLINICAL SCENARIO**  
An opioid-exposed infant at risk for neonatal abstinence syndrome (NAS) is delivered.

**CLINICAL ACTION STEPS**  
**Screening for NAS**  
An infant born to a mother who used opioids (licit or illicit) or had pharmacotherapy for opioid use disorder (OUD) during her pregnancy should be monitored for 4-7 days and managed according to a formal protocol for NAS.  
**Maternal and Infant Toxicology Screening**  
The monitoring and management of infants at risk of NAS should be informed by an interview with the mother about all substance and pharmacotherapy use during her pregnancy, by the clinical status of the infant, and by toxicology screening of the mother and the infant.  
**Informed Consent**  
Any toxicology screening of the mother must be done with her informed consent; toxicology screening in infants does not require informed consent.

  
**SUPPORTING EVIDENCE AND CLINICAL CONSIDERATIONS**  
Screening for NAS  
• The onset of NAS varies among infants and depends on the opioids to which they were exposed. The timing of the onset of NAS varies among opioid-exposed infants. Those exposed to heroin or other short-acting opioids will typically present symptoms within 2–3 days of delivery (Beauman, 2005; Chen, Klein, & Koran, 2003), whereas those exposed to methadone or buprenorphine usually will exhibit NAS symptoms within the first 4 days of birth (Larsson, Velaz, & Harraw, 2009). Median time to treatment initiation has been shown to be one day later in buprenorphine-exposed neonates compared with methadone-exposed neonates (mean of 3 vs. 2 days, respectively; Gaalema, Hail, Badger, Metayer, & Johnston, 2013). Consequently, an opioid-exposed newborn requires a minimum of 4 days (96 hours) in the hospital for NAS scoring. If the infant requires medication to manage NAS, the exact observation time will depend on the infant's expression of NAS and response to treatment (Hudak et al., 2012).

**FACTSHEET TO REVIEW**  
For more information on factors that influence NAS expression, severity, and pharmacological and nonpharmacological treatment options, see Factsheet #10: Management of Neonatal Abstinence Syndrome.

- Central Nervous Disturbances
- Metabolic/Vasomotor/  
Respiratory Disturbances
- Gastrointestinal Disturbances

## Resources

- [Modified Finnegan Scale](#)
- [Withdrawal Assessment Tool \(WAT-1\)](#)

# Objective 5: Screening and Assessment Tools

## NAS Screening Tool



### NEONATAL ABSTINENCE SCORING SYSTEM



Modified Finnegan Neonatal Abstinence Score Sheet <sup>1</sup>													
System	Signs and Symptoms	Score	AM				PM				Comments		
Central Nervous System Disturbances	Excessive high-pitched (or other) cry < 5 mins	2											
	Continuous high-pitched (or other) cry > 5 mins	3											
	Sleeps < 1 hour after feeding	3											
	Sleeps < 2 hours after feeding	2											
	Sleeps < 3 hours after feeding	1											
	Hyperactive Moro reflex	2											
	Markedly hyperactive Moro reflex	3											
	Mild tremors when disturbed	1											
	Moderate-severe tremors when disturbed	2											
	Mild tremors when undisturbed	3											
	Moderate-severe tremors when undisturbed	4											
	Increased muscle tone	1											
	Excoriation (chin, knees, elbow, toes, nose)	1											
	Myoclonic jerks (twitching/jerking of limbs)	3											
Metabolic/ Vasmotor/ Respiratory Disturbances	Generalised convulsions	5											
	Sweating	1											
	Hyperthermia 37.2-38.3C	1											
	Hyperthermia > 38.4C	2											
	Frequent yawning (> 3-4 times/ scoring interval)	1											
	Mottling	1											
	Nasal stuffiness	1											
	Sneezing (> 3-4 times/scoring interval)	1											
	Nasal flaring	2											
	Respiratory rate > 60/min	1											
Gastrointestinal Disturbances	Respiratory rate > 60/min with retractions	2											
	Excessive sucking	1											
	Poor feeding (infrequent/uncoordinated suck)	2											
	Regurgitation (≥ 2 times during/post feeding)	2											
	Projectile vomiting	3											
	Loose stools (curds/seedy appearance)	2											
	Watery stools (water ring on nappy around stool)	3											
	<b>Total Score</b>												
	<b>Date/Time</b>												
	<b>Initials of Scorer</b>												

Term	Score (based on peak NAS score, 24-hour observation with scoring every 3-4 hours)
Mild	0-8
Moderate	9-16
Severe	17+

\*Source: Jones et al., 2010.

Reference: 8



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## Clinical Scenario #2

### Patient: Jane Williams

- Baby girl born at 37 weeks
  - 5 lbs 4oz
  - NAS+
  - Case reported to ChildLine

## Clinical Scenario-Knowledge Check 1

**What education should be provided to a mother when a newborn displays signs and symptoms of NAS/NOWS?**

- A. Benefits of breastfeeding
- B. Benefits of skin-to-skin
- C. Infant medical care plan
- D. Alert to ChildLine for a plan of care
- E. Noise and light reduction environment
- F. All of the above**

## Clinical Scenario-Knowledge Check 2

**What other considerations are there when discharging a postpartum woman and her NAS/NOWS positive infant?**

- A. Continued care needs for the infant
- B. Contraceptives
- C. The discontinuation of breastfeeding in the event of a relapse
- D. Continued monitoring through the ChildLine plan of care
- E. OUD pharmacotherapy adherence
- F. The need for additional family support services
- G. All of the above**

## Module 9

# Summary and Review

## Key Points

- Both mental health and substance use disorders are risk factors for facing stigma in a healthcare setting
- Pregnant and postpartum women represent a unique group of our population living with opioid use disorder and require a special collaborative plan of care.
- All pregnant women should be screened using a validated screening tool for substance use and SDOH during their first prenatal appointment.
- Women who screen positive for OUD should be referred for formal assessment and treatment in addition to regular prenatal care.
- Special considerations for labor pain, postpartum care, and discharge planning are required for women living with OUD or living in recovery.



# Resources

- [SAMHSA Clinical Guide \(2018\)](#)
- [Prescribing Guidelines for Pennsylvania: Use of Addiction Treatment Medications in the Treatment of Pregnant Patients with Opioid Use Disorder \(2016\)](#)
- [Pennsylvania Maternal Mortality Review Report \(2021\)](#)
- [Opioid Use and Pregnancy: Applying CDC's Guidelines for Prescribing Opioids](#)
- [Medication Assisted Treatment \(SAMHSA\)](#)
- [Modified Finnegan Scale](#)
- [Words Matter: Reducing Stigma Surrounding Substance Use Disorder](#)

# Resources (cont.)

## Online Resources



**[Get Naloxone](#)**

FIND TREATMENT.  
Care Provider Search



**[Pennsylvania  
Get Help Now  
Website](#)**



Academy of Perinatal  
Harm Reduction

**[Pregnancy and  
Substance Use  
Harm Reduction  
Toolkit](#)**

**[Find a Drug  
Take-Back  
Location](#)**



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## Resources (cont.)

### Online Resources



**Women, Infants  
and Children  
(WIC)**



POSTPARTUM SUPPORT  
INTERNATIONAL

**Postpartum Support  
International (PSI)**



**Pennsylvania  
Family Support  
Services**

**1-800-944-4773**

**PA DOH NAS Family Guide Tool Kit**



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