

Maine Medical

PARTNERS

Women's Health

A department of Maine Medical Center

Guideline for Substance Use Disorder in Pregnancy – Focus on Opioids

Screening Recommendations:

Universal screening for opioid use, with brief intervention and referral when indicated, improves maternal and fetal outcomes. Screening for opioid use should be part of a broader screening strategy to include prescription and non-prescription substances, alcohol use, tobacco use including vaping and marijuana, mental health problems and intimate partner violence. Screening based only on risk factors can lead to missed cases; it is essential that screening approaches be applied to all patients.¹

Screening tools suggested by ACOG include 4Ps, NIDA Quick Screen and CRAFFT² (Appendix 1).

Urine Toxicology:

Validated verbal screening tools, vs. urine toxicology, are the preferred methods for screening (ACOG). Routine drug testing for screening is discouraged by ACOG due to limitations:

- A negative test does not rule out sporadic substance use
- Many substances may be missed
- A positive test is not diagnostic in itself for opioid use disorder
- False positive results can occur
- Mandatory urine testing may be a deterrent to seeking prenatal care

Urine drug testing should be performed only with the patient's consent and after providing information including ramifications of a positive result. Testing should be based on medical necessity (Appendix II), but can be offered to verify use of only prescribed medications.

Drug testing panels vary with the labs used, and the lab should be consulted for the composition of the panel available and whether testing for methadone and buprenorphine metabolites must be added separately. Results must be confirmed before considered accurate.

Antepartum:

In addition to routine prenatal care:

- HIV, Hepatitis B, Hepatitis C, chlamydia, gonorrhea, syphilis, and tuberculosis, and TB test. Repeat third trimester or earlier if the woman is considered at increased risk.
- First trimester dating ultrasound. Targeted fetal survey 18 – 20 weeks. Consider sequential ultrasound growth assessments every four weeks starting at 24 weeks.
- Assess need for anti-emetics, antacids, bowel regimen.
- Prescription Monitoring Program checks throughout pregnancy
- Verification that the patient has Naloxone, with prescription written if needed.
- Consultations and/or referrals for ongoing management: anesthesia, addiction medicine and pain medicine specialists, pediatrics, maternal-fetal medicine, behavioral health, nutrition, social services as needed.
- Social Work consult as soon as possible upon entry in care to assist with referrals to resources such as WIC, Public Health Nursing, Maine Families, and any other needed supports.
- Addiction specialist to manage Medication Assisted Treatment (MAT)
- Anticipatory guidance:
 - Childbirth education including coping mechanisms and non-pharmacologic/pharmacologic pain management options
 - To avoid anticipatory anxiety, patients should be advised that methadone or buprenorphine will be maintained during hospitalization.
 - Breastfeeding should be encouraged if mother is stable in a treatment program and has no other contraindications
 - Determination and documentation of post-partum contraceptive plan, with placement of long-acting reversible contraceptive planned prior to discharge when possible.
- Discussion of postpartum expectations:
 - Neonatal withdrawal monitoring for a minimum of 5 days.
 - Notification to the Office of Child and Family Services shortly after delivery as required by Maine state law.

Peripartum:

- Contact the MAT provider to verify and maintain current dose at time of admission for a patient with substance abuse disorder and/or on medication assisted therapy.
- While the patient is admitted to the hospital, an attending provider may legally prescribe Buprenorphine and Methadone to maintain a patient's outpatient dose during his/her hospitalization.
- Women on Medication Assisted Treatment (MAT) may need higher doses of medication for pain relief in an effort to provide adequate analgesia for acute

conditions or for labor. In labor, parenteral opioids and regional analgesia may be offered. A combination of opioids, acetaminophen, and non-steroidal anti-inflammatory medications can be used postpartum.

Postpartum:

- Patient should have follow up with MAT provider within 48 hours to assess dose and consider dosing decrease.
- Breastfeeding should be encouraged in women who are stable on their agonist agent, have no other contraindications (HIV infection) and who are not using illicit drugs. Women should be counseled to suspend breastfeeding in the event of a relapse. Resource for breastfeeding medication safety: <https://www.ncbi.nlm.nih.gov/books/NBK501922/>
- Long-acting reversible contraception should be discussed prenatally and offered prior to hospital discharge.
- Women should be screened for postpartum depression and other comorbid mental health conditions, with access to psychosocial support provided.

Opioid dependence and pharmacotherapy overview:

Opioid agonist pharmacotherapy is preferable to medically supervised withdrawal during pregnancy (ACOG). Pharmacotherapy is indicated to avoid withdrawal, which is associated with high relapse rates leading to poor neonatal outcomes, including early preterm birth or fetal demise. Neonatal abstinence syndrome resulting from agonist therapy is a treatable condition and evidence at this time indicates that it does not lead to long term complications.

Opioid withdrawal symptoms can include:

- Generalized pain, muscle pain, nausea, diarrhea, sweating, rhinorrhea, tearing, dilated pupils, tremor, gooseflesh, restlessness, anxiety.

Timeline for withdrawal syndrome:

- Short-acting opioids, i.e., heroin – symptoms within 4-6 hours, peak at 1 v- 3 days, subside over 5 – 7 days, up to 72 hours. Side effects resolve within one week.
- Long-acting opioids, i.e. methadone – withdrawal begins 24-36 hours after use and may last for several weeks.

Methadone:

Perinatal methadone dosage should be managed by an addiction treatment specialist and can only be prescribed within a licensed opioid treatment program or a hospital inpatient setting.

Recommended maternal dosing:

- Methadone Initiation: 10-20 mg over 24 hours, advancing 5-10 mg every 6 hours for signs of withdrawal
- Maintenance: 10-300 daily or twice daily

Methadone disadvantages:

- Change in dose and/or split dosages may be required in pregnancy, due to rapid metabolism. Withdrawal signs and symptoms (drug craving, abdominal cramping, nausea, insomnia, irritability, anxiety) may be evidence of an insufficient dose, leading to risk of relapse and fetal stress. Lower doses are not consistently associated with milder or shorter NAS symptoms.

Methadone advantages:

- May be more appropriate for patients requiring structure and supervision
- Less constipation
- Fatigue
- Significant pharmacokinetic drug interactions with many other drugs including antiretroviral agents

[Buprenorphine:](#)

Advantages of buprenorphine over methadone

- Office-based management vs. daily treatment by treatment center
- Lower risk of overdose
- Less severe neonatal abstinence
- Less need for dosage adjustments
- Possibly less severe neonatal abstinence
- Fewer drug interactions
- Decreases preterm delivery

Disadvantages:

- Rare reports of hepatic dysfunction
- Lack of long-term data on child effects,
- Risk of precipitated withdrawal with induction,
- Increased risk of diversion

Dose should be individualized with a goal to avoid symptoms of withdrawal.

Note: Should not transition from methadone to buprenorphine in pregnancy due to withdrawal risk. MAY transition from buprenorphine to methadone.

Naloxone:

Short-acting opioid antagonist that can rapidly reverse opioid effects. Should be administered in the case of maternal overdose.

Naltrexone:

Limited safety data re: fetal effects. Long-acting form may be more effective in maintaining abstinence but risk-benefit discussion required if continuing treatment into pregnancy

Alternative substance use:

Marijuana:

- ACOG recommends no use of marijuana during pregnancy, postpartum or while breastfeeding.
- Discontinuation of marijuana and antianxiety meds are safe during pregnancy.
- Marijuana is believed to have neurodevelopment impact on the developing fetus/child
- Data is not conclusive in regard to the risk of growth restriction, preterm labor, perinatal death, and stillbirth. Growth restriction risk may be increased. Risk of preterm labor and still birth may be increased, particularly with concomitant tobacco use.
- Marijuana use during breastfeeding is discouraged. There are insufficient data to evaluate the effects of marijuana use during lactation and breastfeeding.⁷

Methamphetamines, Cocaine/Crack, Chronic Heroin:

- MFM consult.
- Significant maternal and fetal effects and risks.
- Refer to: ACOG Committee Opinion #479 Methamphetamine Abuse in Women of Reproductive Age March 2011.⁸

NOTE: Refer to The Snuggle ME Guidelines: Tools for Caring for Women with Addiction and Their Babies, 2nd Edition, for a more comprehensive resource and tools to care for pregnant women with substance use disorders and their newborns.

Appendix

I. Substance use screening tools

4P Screen:

1. **P**arents: Do they have problems with drugs/alcohol?
2. **P**artner: Does partner have problems with drugs/alcohol?
3. **P**ast: Has the patient had past history of use of drugs and/or alcohol?
4. **P**resent: Does the patient use drugs/alcohol?
 - what?
 - how much?
 - how long?

CRAFT Screen:

- C**: Has the patient ridden in a **car** with others who are using drugs or drinking?
- R**: Does the patient use drugs/alcohol to **relax**?
- A**: Does the patient use drugs/alcohol when **alone**?
- F**: Does the patient's **family/friends** ask them to stop drinking and using drugs?
- T**: Has the patient gotten in **trouble** related to drug/alcohol use?

If the answer is "yes" to two or more of these questions, then further evaluation is warranted and possible urine toxicology.

II. Toxicology test - potential medical indications:

Physical signs of substance use or withdrawal
3 or fewer prenatal visits
Smell of alcohol or chemicals noted
Recent history of substance abuse or entry into treatment
Fetal distress
Placental abruption
Preterm labor
Intrauterine growth restriction (IUGR)
Unexplained, intermittent hypertensive episodes
Stroke or heart attack
Severe mood swings
Multiple medication sources

References:

1. Wright TE, Terplan M, Ondersma SJ, Boyce C, Yonkers K, Chang G et al. The role of screening, brief intervention and referral to treatment in the perinatal period. *Am J Obstet Gynecol* 2016;215:539-47.
2. ACOG Committee Opinion No. 711. Opioid abuse, dependence, and addiction in pregnancy. August 2017 (reaffirmed 2019).
3. UpToDate Substance Use by Pregnant Women. www.uptodate.com (accessed 3/30/2020)
5. Snuggle ME guidelines: <https://www.maine.gov/dhhs/SnuggleME/>
6. Lactmed <https://www.ncbi.nlm.nih.gov/books/NBK501922/> (accessed 3/30/2020)
7. ACOG Committee Opinion No. 722 Opioid Use and Opioid Disorder in Pregnancy. August 2017.
8. ACOG Committee Opinion No. 479 Methamphetamine Abuse in Women of Reproductive Age. March 2011.