Screening and Brief Intervention for Substance Use in Pregnancy

All women should be screened for substance use at the first prenatal visit using a screening tool; e.g., the Modified NIDA Quick Screen (Modified NIDA) *(see SUD2).*

If **positive screen** on Modified NIDA, had aberrant urine test, or clinical suspicion *(see SUD2)*, woman is **at risk**

If **negative** screen, then woman is lower risk

Brief Assessment

1. "What substances have you been using in the past 3 months? During this pregnancy?"
2. "How much of each substance have you been using at a time?"
3. "How frequently are you using them?"
4. "How does this affect your life (job, home life, self-care, health, emotions)?"
5. "Are you being treated for an SUD? Have you had prior treatment?"

Educate

1. Provide brief education about recommendations to not use alcohol, tobacco, cannabis, illicit opioids, or other drugs.
2. Encourage the patient to ask for help in the future, as needed.

Stratify into risk group

High Risk

Current: Opioid use or binge pattern/heavy use of any substance(s) or relapse of any SUD

Moderate Risk

Current: Low-level use of non-opioid substances, engaged in MAT, or other SUD treatment
History: High use in past and/or past treatment for SUD

Low Risk

Current: No use
History: Low-level use prior to learning of pregnancy

Brief Intervention

1. "How ready are you to quit now?" Ask the patient to rate this motivation on a scale from 1-10.
2. "How confident are you that you can stop?" Ask the patient to rate their confidence on a scale from 1-10.
3. "Why did you rate that way?"
4. "How can we increase this score?"

Create Treatment and Monitoring Plan

1. Refer to or provide medication treatment for opioid/alcohol use (see *SUD4*)
2. Recommend non-pharmacological treatment (see *SUD3*)
3. Formulate a monitoring plan including:
   - Repeat Modified NIDA and Brief Assessment at least once per trimester
   - Urine testing at least once per trimester
   - Check MassPAT at each visit
4. Identify who will coordinate Plan of Safe Care (see *SUD3*)
5. Call MCPAP for Moms with questions

Is the patient currently misusing any substance?

Yes

Brief Intervention

1. "How ready are you to quit now?" Ask the patient to rate this motivation on a scale from 1-10.
2. "How confident are you that you can stop?" Ask the patient to rate their confidence on a scale from 1-10.
3. "Why did you rate that way?"
4. "How can we increase this score?"

Is there an active need for a referral to treatment?

Yes

Monitor and Refer to Treatment

1. Counsel on MAT in pregnancy (see *SUD4*) and non-pharmacological treatment (see *SUD3*)
2. Formulate a monitoring plan including:
   - Repeat Modified NIDA and Brief Assessment at least once per trimester
   - Urine testing at least once per trimester
   - Check MassPAT at each visit
3. If already in treatment, contact SUD provider
4. Identify who will coordinate Plan of Safe Care (see *SUD3*)
5. Call MCPAP for Moms with questions

No

Monitor

1. Repeat Modified NIDA and Brief Assessment at least once per trimester
2. Urine testing at least once per trimester
3. Check MassPAT at each visit
4. If already in treatment, contact SUD provider
5. Identify who will coordinate Plan of Safe Care (see *SUD3*)
6. Call MCPAP for Moms with questions

No

For all women with any opioid use or on MAT for OUD, discuss:

- Overdose prevention (see *SUD6*)
- MAT during pregnancy/postpartum (see *SUD4*)
- Neonatal Opioid Withdrawal Syndrome (NOWS) - a.k.a. Neonatal Abstinence Syndrome (NAS)
- Pain management (see *SUD5*)
- Plan of Safe Care and DCF reporting (see *SUD3*)

MAT: medication for addiction treatment
SUD: substance use disorder
OUD: opioid use disorder
MassPAT: Massachusetts Prescription Awareness Tool

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Assessment of Substance Use in Pregnancy

Modified NIDA Quick Screen (Modified NIDA)

Ask: "In the past three months, how often have you used:"

Alcohol (four or more drinks a day)	☐ Never	☐ Once or twice	☐ Monthly	☐ Weekly	☐ Daily
Tobacco products	☐ Never	☐ Once or twice	☐ Monthly	☐ Weekly	☐ Daily
Prescriptions drugs not used as prescribed or any marijuana	☐ Never	☐ Once or twice	☐ Monthly	☐ Weekly	☐ Daily
Illegal drugs	☐ Never	☐ Once or twice	☐ Monthly	☐ Weekly	☐ Daily

Any answer other than "never" is a positive screen and should prompt follow-up questions to further characterize which substance(s) are being used, the amount, and the time course (see *SUD1*).

Adapted from the NIDA Quick Screen

Behaviors that may warrant clinical suspicion for a substance use disorder (SUD)

Gather more history	Monitor closely	Intervene
• Dose escalation • Very focused on controlled substances • Substantial effort/time/resources spent on obtaining controlled substances • Requests early refills of controlled substances • Evidence of tolerance • History of withdrawal	• Loses prescriptions for controlled substances • Requesting specific agent, route, frequency • Purchasing illicit drugs • Taking diverted opioids (taking others' prescriptions) • Multiple providers prescribing controlled substances • Mood or personality changes • Emotional lability	• Clinical signs of intoxication (confused, sedated or hyperactive, rapid or slurred speech) • Withdrawal • Evidence of tampering with IV or hoarding pills while inpatient • Crushing/injecting/snorting pills • Seeing drug use paraphernalia (e.g., syringes or pipes) • Physical signs of injection, stigmata of chronic alcohol use, intranasal irritation

Interpretation of Urine Drug Tests

Urine drug tests are useful for monitoring high-risk women and preferred over universal screening because they can:

- Detect undisclosed substances
- Help identify risk for neonatal withdrawal
- Help with risk assessment for medical complications (withdrawal, management of hypertension)
- Confirm use of prescribed medications

Discussion of urine drug tests results with patients should focus on promoting safety and not be punitive in nature.

Approximate Detection Times in Urine

Drugs	*Duration of Detection in Urine*
Buprenorphine	*1-6 days*
Methadone	*Up to 14 days*
Cannabinoids	*Up to 60 days (in chronic users)*
Cocaine	*1-3 days*
Heroin	*1-3 days*
Benzodiazepines	*Up to 21 days*

Urine drug tests have limitations because:

- They only reflect recent use, and detection times vary.
- Drug levels may vary widely depending on fluid intake, time elapsed since use, or individual variation.
- Providers need to know the characteristics of tests used within their institution because different assays may be used by different labs.
- They do not capture all illicit use (e.g., synthetic cannabinoids (K2/Spice), synthetic opioids (fentanyl, carfentanil), hallucinogens (LSD)).
- Patients can tamper with their urine specimen.
- The opioid urine assay tests primarily for heroin, morphine, and codeine and **does not** test for synthetic opioids like oxycodone, fentanyl, methadone, and buprenorphine, which each have their own urine test.

If the urine drug test is inconsistent with the patient's report, order confirmatory testing (e.g., Gas Chromatography/Mass Spectrometry – a.k.a. GC/MS).

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Treatment Options for Perinatal Substance Use Disorder (SUD)

How to Find Treatment and Resources

Bureau of Substance Abuse Services (BSAS) Helpline: Helps patient/provider determine treatment needs	1-800-327-5050 www.helplinema.org
Massachusetts Behavioral Health Access (MABHA) Service Locator: Provider-oriented treatment locator	www.mabhaccess.com/SUD.aspx
Institute for Health and Recovery Resource Locator: Community resource locator by zip code	www.healthrecovery.org/resource-search
The Journey Project: Website for pregnant and parenting women with substance use disorders	www.journeyrecoveryproject.com

Psychosocial Treatments

Peer Support	Professionally led	Residential
• Alcoholics Anonymous: www.aa.org • Narcotics Anonymous: www.na.org • SMART recovery: www.smartrecovery.org	• Cognitive Behavioral Therapy • Motivation enhancement • Mindfulness-based treatments • Couples/family • Group counseling	• Inpatient rehabilitation • 28-day programs/"rehab" • Long-term residential • Sober living • Therapeutic community
Patients can self-refer to any of the above options	Call MCPAP for Moms for assistance with referrals	

Plan of Safe Care (POSC)

The Plan of Safe Care is a document created jointly by a pregnant or parenting woman and her providers. This document helps a women and her team determine services or supports they may find useful to record and organize the patient's engagement in care.

- All women with a history of SUD should have a POSC coordinated.
- The POSC is intended to enhance collaboration and coordination of care.
- SUD treatment providers licensed by the MA BSAS are required to create a POSC and communicate about the POSC with other providers.
- POSC can be initiated at any time to facilitate the patient's engagement in care.
- POSC can be used to identify additional resources that may be helpful.
- DCF will ask if a POSC exists at the time any report is made.

A suggested template can be found at http://www.healthrecovery.org/safecare/.

Treatment Settings for Substance Use Disorders

Level of Care	Services Offered	Additional Notes/Perinatal Options
Outpatient	Counseling	• Individual or group • Facilitated by social workers or mental health/drug and alcohol counselors
	Medication management	• Methadone needs to be administered by a federally licensed facility. • Buprenorphine can only be prescribed by a waivered provider. • Naltrexone, acamprosate, disulfiram, or medications for smoking cessation can be prescribed by any provider *(see SUD4, SUD5).*
Intensive Outpatient	Group and Individual Counseling +/- medication	• Can be used for direct admission or as a step-down from a higher level of care • Can vary in length and frequency of sessions • Examples include: Intensive Outpatient program (IOP), Structured Outpatient Addiction Program (SOAP), and Partial Hospital Program (PHP)
Acute Treatment Services (a.k.a. "Detox")	Medically Supervised Withdrawal (Inpatient)	• Indicated for physiological dependence on alcohol or benzodiazepines • Difficult to access during pregnancy • Tapering opioids is not recommended during pregnancy.
Short-Term Residential (under 30 days)	Step-down and non-pharmacologic "detox"	• Examples include Clinical Stabilization Services (CSS) and Transitional support Services (TSS) or "holding." • Some treat co-morbid psychiatric and substance use disorder (dual-diagnosis) and include: Individual, group, family therapy, case management, and linkage to aftercare, and medication. • Some programs admit pregnant women and coordinate with prenatal care providers.
Long-term Residential (over 30 days)	Structured group living with supervision and treatment provided by addiction professionals	• Examples include 4-6 month recovery homes or "halfway houses" and specialized residential programs for women, families, and youth. • Many programs assist with employment, parenting skills, and retaining/regaining custody of children. • Some have enhanced services for pregnant/post-partum women and their infants, which include the coordination of perinatal/pediatric care. • Individual, group therapy, case management
Involuntary Commitment/ Section 35 (up to 90 days)	Court-ordered treatment for medically supervised withdrawal and step-down services	• Family/providers can petition the local court with evidence that the patient is a danger to self/others due to substance use. • The patient is brought before the judge, who decides if commitment is warranted.

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Choosing a Medication for the Treatment of Opioid Use Disorder (OUD)

Medication for addiction treatment (MAT) with methadone or buprenorphine is the first line for treatment of OUD during pregnancy. It is important to limit the use of benzodiazepines and other sedating medications to decrease overdose risk.

Is the patient already on a medication for the treatment of opioid use disorder?

YES

Avoid changing medication during pregnancy

- Continue medications that the patient is stable on and optimize the dose.
- The patient may require dose increase as pregnancy advances and dose decrease at 2-4 weeks postpartum.
- If withdrawal symptoms emerge in the third trimester, you may need to increase total daily dose or frequency.

NO

Considerations for initiating medication

- Which medications are readily available?
- Which treatment setting can the patient get to?
- Which medication has the patient done well with before?
- What does the patient prefer?
- For all medication choices, make sure to consider implications for pain management *(see SUD5)* and neonatal withdrawal risk.

First-Line Treatments

	Mechanism	Pros	Cons	Special Considerations in Pregnancy	Lactation
Methadone	Full agonist at the Mu opioid receptor	Administered in structured setting with daily observed treatment Often includes multidisciplinary treatment such as groups and counseling	Must be prescribed through a federally licensed clinic, and clinics are not easy to access Daily observed dosing is not compatible with some work/childcare schedules. Can be sedating at higher doses	Risk of QTc prolongation Rapid metabolism in the third trimester may require dose increase and change from daily to twice daily doses. Pregnant women are eligible for expedited access to a methadone clinic. Multiple drug-drug interactions (e.g., many antiretrovirals, rifampin, phenytoin)	Translactal passage: 1-6 % of the maternal weight adjusted dose Low infant exposure should not preclude breastfeeding. Breastfeeding is encouraged in substance-exposed newborns unless there is active substance use or risk of infection.
Buprenorphine (Suboxone, Subutex, Sublocade)	Partial agonist at Mu opioid receptor High-affinity receptor binding	Office-based treatment; can get a prescription at variable intervals Not usually sedating Low risk for overdose	Must be prescribed by a waivered provider Can complicate pain management in labor (see *SUD5*)	Patient must be in mild withdrawal prior to initiation treatment May require dose increase in third trimester Buprenorphine without naloxone (Subutex) is preferred if available; less-severe neonatal opioid withdrawal	Translactal passage: 1-20 % of the maternal weight adjusted dose (only absorbed sublingually and not orally) Breastfeeding is encouraged in substance-exposed newborns unless active substance use or risk of infection.

Treatments with Less Evidence for Use in Pregnancy

Gradual taper with medication (a.k.a. "detox")	Naltrexone
• Can be done using taper of methadone or buprenorphine • Emerging data for safety in pregnancy but still not standard treatment • High risk of relapse	• Reversible binding of opioid receptor antagonist with efficacy for alcohol and opioid use • Available as oral, daily medication (Revia), and IM monthly injection (Vivitrol) • Very limited and emerging data in pregnancy • Can complicate pain management • Requires 7-10 days of abstinence from all opioids prior to starting naltrexone

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Management of Pain During and After Delivery

Pregnant women with opioid use disorder (OUD) must be reassured that their pain during and after delivery can and will be treated. For women on medication for addiction treatment (MAT), it is important to support continued treatment of pain, because adequate pain control is essential for their health and well-being.

Addressing Pain in Patients with OUD

Special considerations for patients on medication treatment for OUD

- Medications used for treatment of OUD are not sufficient alone for pain control.
- Maintenance doses of MAT should be continued throughout labor and delivery.
- When using buprenorphine and methadone during pregnancy:
  - Increase total daily dose
  - Increase frequency of administration to 2-4x per day
- Additional opioids may be needed if non-opioid treatments are insufficient.

Buprenorphine

- Avoid butorphanol, nalbuphine, and pentazocine in all patients with OUD or chronic opioid use as these are partial agonists and can precipitate opioid withdrawal.
- If using additional opioids for pain, the patient may require higher doses due to the buprenorphine-blocking effect (high-affinity).

Methadone

- Avoid butorphanol, nalbuphine, and pentazocine in all patients with OUD or chronic opioid use as these are partial agonists and can precipitate opioid withdrawal.
- Confirm the dose with the provider, and notify the provider of all pain medications given.
- Baseline dose is not sufficient for analgesia.
- Pain relief can be achieved with additional doses of methadone; split dose three times per day.
- If the patient is NPO, methadone can be given by IV, IM, or SC (if IM or SC, give half the dose divided 2-4 times per day).

Naltrexone

- Blocks the analgesic effects of opioids:
  - Oral naltrexone blocks analgesia for 72 hours after last dose.
  - IM (depot) blocks analgesia for 14-25 days
- For acute pain management favor regional and non-opioid options.

Optimize non-opioid medication options

- Acetaminophen
- NSAIDs (e.g., ibuprofen, ketorolac)
- Ketamine, if available
- Neuraxial or regional blocks

Optimize non-medication treatment options

- Mindfulness
- Meditation
- Hypnosis
- Massage
- Heat/Ice
- Cognitive Behavioral Therapy (CBT)
- Physical therapy/light exercise
- Biofeedback
- Acupuncture

Opioids can be used if the above strategies do not work (*see SUD6 regarding safe opioid prescribing*).

Managing Medication for Addiction Treatment (MAT) during the Perioperative/Postpartum Period

The dose of buprenorphine or methadone may need to be increased throughout the pregnancy.

- Due to metabolic changes during pregnancy it is common to have to increase the frequency of methadone and buprenorphine dosing; this can be continued post-delivery while pain management is challenging.
- Metabolism gradually returns to the pre-pregnancy state in the 2-4 weeks postpartum, so dosing needs to be decreased to pre-pregnancy dosing, and pain and sedation levels should be monitored.

Prior to delivery, collaborate with anesthesia colleagues to plan intrapartum pain management.

- Use a regional analgesia if possible (epidural or spinal, regional blocks if appropriate).
- Maximize non-opioid pain relief (avoid NSAIDs prior to delivery).
- Pain must be treated adequately to enable mobility for newborn care and breastfeeding.

Continue methadone and buprenorphine during labor and cesarean or vaginal delivery.

- Do not stop MAT at the time of delivery because it puts women at increased risk for relapse, and restarting MAT in the postpartum period is challenging.

Continuation of MAT in Postpartum period

- Avoid discontinuation of MAT in 6-12 months to minimize risk of relapse/overdose during this high-risk time.

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Opioid Overdose Prevention

Opioid overdose is a leading cause of preventable maternal mortality in Massachusetts. Opioid use disorder (OUD) greatly increases the risk of death by overdose up to 12 months postpartum.

Safe Opioid Prescribing

Ensure the patient and caregivers have access to naloxone.	Prescribe a short duration of narcotic medication (3-7 days).
Use short-acting/immediate-release opioids at the lowest effective dose.	Discuss safe storage and disposal of opioid medication to limit risk for diversion and overdose.
Perform urine drug monitoring for patients taking opioids (confirm use of prescribed medication, and check whether the person is taking other illicit agents).	Engage the patient in an agreement for close monitoring.
Check the Massachusetts Prescription Awareness Tool (MassPAT): All licensed prescribers in Massachusetts have access to MassPAT - https://massachusetts.pmpaware.net/login.	

Risk Factors for Opioid Overdose

- Combining use of opioids with other drugs (e.g., benzodiazepines or alcohol)
- A recent period without any opioid use – high risk of this with postpartum relapse because of the loss of opioid tolerance
- Contamination of illicit drugs with other active substances (e.g., heroin is often contaminated with fentanyl)
- Medical risks for respiratory depression (e.g., history of respiratory disease/infection, on other sedating medications)
- Previous overdose(s)
- Using alone

Naloxone (Narcan)

Naloxone is an opioid antagonist that reverses the effects of opioid intoxication.	
The goal of administering naloxone is to restore respiration and prevent death related to opioid overdose.	
Naloxone is most commonly administered intra-nasally.	
Prescribe naloxone to all patients at risk for overdose.	
Teach patients and friends/family supports how to administer nasal naloxone.	

How to Identify an Overdose	Steps to Manage an Overdose	Recovery Position
• Pinpoint pupils • Decrease/absent breathing • Unresponsiveness to loud voice or sternal rub • Body goes limp • Heart rate slows or stops • May have a blue color to skin or nails Counsel patients and their supports about how to identify an overdose.	**1.** Call 911 and stay until EMS arrives. **2.** Remove the kit from packaging (two sprays per kit). **3.** Hold nasal spray with your thumb on the bottom of the plunger and two fingers on either side of the nozzle. **4.** Insert the tip of the nozzle into either nostril until your fingers touch the bottom of the person's nose. **5.** Press the plunger firmly to deliver the first dose. **6.** Remove nasal spray. **7.** Wait 3 minutes; if there is no response, administer the second dose in the alternate nostril. **8.** Place the patient in the recovery position. Advise the person not to place the victim in an ice or water bath, induce vomiting, or try to wake by slapping/hitting.	
The Massachusetts Good Samaritan Law protects people from prosecution for drug possession if seeking help for an overdose.		

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Massachusetts Child Psychiatry Access Program
MCPAP For Moms

Summary of Impact and Management of Substance Use during the Perinatal Period

SUD7

Risks of Maternal Use	Acute Intoxication	Withdrawal	Ongoing Management
Opioids			
Fetal effects: Opioids do not cause structural fetal abnormalities. However, opioid use during pregnancy is associated with intrauterine growth restriction, fetal demise, meconium leakage/aspiration, and preterm labor. **Neonatal effects:** Neonatal Abstinence Syndrome (NAS)/Neonatal Opioid Withdrawal Syndrome (NOWS), hypotonia, respiratory depression at delivery **Maternal effects:** Postpartum hemorrhage, risk of maternal overdose (mortality increases first year postpartum)	**Symptoms:** Sedation, euphoria, decreased respiration **Management:** Naloxone (Narcan), monitoring respiratory status	**Symptoms:** Nausea, vomiting, diarrhea, abdominal muscle pain, leg cramping, rhinorrhea, lacrimation, recklessness, sweating, anxiety, hot and cold flashes, tachycardia, and yawning **Management**: Initiate agonist therapy to decrease risk for relapse. There is mixed data regarding the negative impact of maternal opioid withdrawal.	Pharmacologic treatment is the first line to decrease relapse risk. **Methadone** can only be obtained through a federally licensed clinic. **Buprenorphine (Suboxone, Subutex)** must be prescribed by a waivered provider. Psychosocial treatments like peer supports, counseling, and sober living should be offered concurrently.
Alcohol			
Fetal effects: Spontaneous abortion, pre-term labor, stillbirth, intrauterine growth restriction **Neonatal effects:** Fetal Alcohol Spectrum Disorder (FASD) and other developmental/behavioral problems, intoxication, withdrawal, Sudden Infant Death Syndrome (SIDS) **Maternal effects:** Hepatic/pancreatic toxicity, physiologic dependence, risks of injuries/falls	**Symptoms:** Disinhibition, sedation, slowed reaction time, vomiting, loss of coordination, sedation/loss of consciousness **Management:** IV fluids (supplement with multi-vitamin thiamine and folate), prevention of physical injury	**Symptoms:** Rapid heart rate, increased blood pressure, tremor, anxiety, flushing, diaphoresis, nausea, hallucinosis, delirium tremens, and seizures **Management:** Benzodiazepine taper. Lorazepam (Ativan) is preferred over other benzodiazepines. If the patient is using benzodiazepines, manage the taper with same medication being used. There is limited data regarding the impact of withdrawal on pregnancy. The setting for withdrawal management is individually determined based on obstetric status, gestational age, and medical and psychiatric comorbidity.	**Naltrexone:** Emerging data suggests low risk of adverse birth outcomes. **Disulfiram (Antabuse):** Not recommended for use in pregnancy due to risk of fetal malformation and severe reaction with ETOH use **Acamprosate (Campral):** No human pregnancy data Psychosocial treatments such as peer supports, counseling, or sober living should be offered concurrently.
Benzodiazepines			
Fetal effects: Not teratogenic, can slow fetal movement **Neonatal effects:** Preterm birth, low birth weight, low apgar, withdrawal syndrome, admission to NICU **Maternal effects:** Physiologic dependence, worsening of depression and anxiety, cognitive decline	**Symptoms:** Anxiolysis, euphoria, amnesia, disinhibition and symptoms similar to alcohol intoxication **Management:** Flumazenil can be used to reverse acute overdose, though it is associated with increased risk of seizure, and there is no human pregnancy or lactation data.	**Symptoms:** Rapid heart rate, increased blood pressure, tremor, anxiety, flushing, diaphoresis, nausea, hallucinosis, delirium tremens, and seizures **Management:** Benzodiazepine taper. Lorazepam (Ativan) is preferred, but may also use the same agent patient is dependent on. If using benzodiazepines, manage the taper with the same medication being used. There is limited data regarding the impact of alcohol or benzodiazepine withdrawal on pregnancy. The setting for withdrawal management is individually determined based on obstetric status, gestational age, and medical and psychiatric comorbidity.	The primary goal is to manage underlying symptoms and psychiatric comorbidity. Psychosocial treatments such as peer supports, counseling, or sober living should be offered concurrently.

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Massachusetts Child Psychiatry Access Program
MCPAP For Moms

Summary of Impact and Management of Substance Use during the Perinatal Period (cont'd) SUD8

Risks of Maternal Use	Acute Intoxication	Withdrawal	Ongoing Management
Cannabis			
Fetal effects: There is increased risk for psychiatric and substance use disorders in offspring. There are similar risks associated with smoking tobacco. Lipophilic (e.g., stores in fetal brain and body fat) **Neonatal effects:** Associated with deficits in visual processing, executive function, attention, academic achievement **In lactation:** Levels of cannabinoids in breastmilk can exceed maternal serum levels, and exposure via breastmilk is associated with lethargy, slowed motor development, and increased risk of Sudden Infant Death Syndrome (SIDS). **Maternal effects:** Risks are associated with smoking, exacerbation of depression, anxiety or psychosis; heavy use could trigger hyperemesis syndrome .	**Symptoms:** Euphoria, anxiety or paranoia, impaired judgement, conjunctival injection **Management:** Supportive care	**Symptoms:** Irritability, anxiety, sleep difficulty, change in appetite, mood changes, abdominal pain, shakiness, tremors, headache, and diaphoresis **Management:** Generally presents within 2-3 days of cessation of use and can last 2-3 weeks. Symptomatic and supportive care.	Women should be advised to abstain during pregnancy/breastfeeding. Given the dose response for some risks, like growth restriction, even cutting down may be beneficial. Assess for mental health or comorbid condition. There is no FDA-approved pharmacotherapy for cannabis use disorder. Psychosocial treatments are indicated.
Cocaine, Amphetamines, and Other Stimulants			
Fetal effects: Intrauterine growth restriction, placental abruption, increased risk for still birth **Neonatal effects:** Transient hypertonia, irritability, hyperreflexia. Vasoconstriction can increase the risk of necrotizing enterocolitis. There is mixed data on neurodevelopmental impact. **Maternal effects:** Hypertension and coronary vasospasm, pregnancy loss	**Symptoms:** Euphoria, agitation, hyperactivity, anxiety, disorientation, confusion, and psychosis Risk for placental abruption with binge use **Management:** If severe, manage agitation with benzodiazepines or antipsychotic. Acute intoxication can confound assessment of vital signs and management of labor. ***Avoid beta blockers.***	**Symptoms:** Sedation/somnolence, dysphoria, vivid dreams **Management:** Supportive care: symptomatic treatment for physical symptoms, otherwise does not require pharmacologic treatment	Anti-craving agents such as topiramate, tiagabine, and modafinil are used in non-perinatal patients, however have not been well studied in pregnancy and lactation. Psychosocial treatments are the primary evidence-based treatment – peer supports, counseling, and sober living.
Tobacco			
Fetal effects: Smoking is associated with spontaneous abortion and intrauterine growth restriction. Nicotine is associated with miscarriage and stillbirth. **Neonatal effects:** Preterm birth, low birth weight, SIDS, persistent pulmonary hypertension of the newborn **Maternal effects:** Increased risk of deep vein thrombosis, pulmonary embolism, stroke, respiratory illness	**Symptoms:** Acute use can result in increased heart rate, blood pressure, and GI activity. **Management:** Supportive care is generally sufficient.	**Symptoms:** Cessation has been associated with cravings, anxiety, insomnia, and irritability. **Management:** Nicotine replacement can help with acute withdrawal, with the goal of eventual, gradual taper.	Quitting is the goal, but cutting down has benefits. Nicotine replacement should be used with a goal of cessation, not for ongoing and/or concurrent use. **E-cigarettes:** not well studied in pregnancy **Bupropion:** minimally effective **Varenicline:** effective, but limited pregnancy data Quitworks offers free phone counseling.

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