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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(Over)

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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