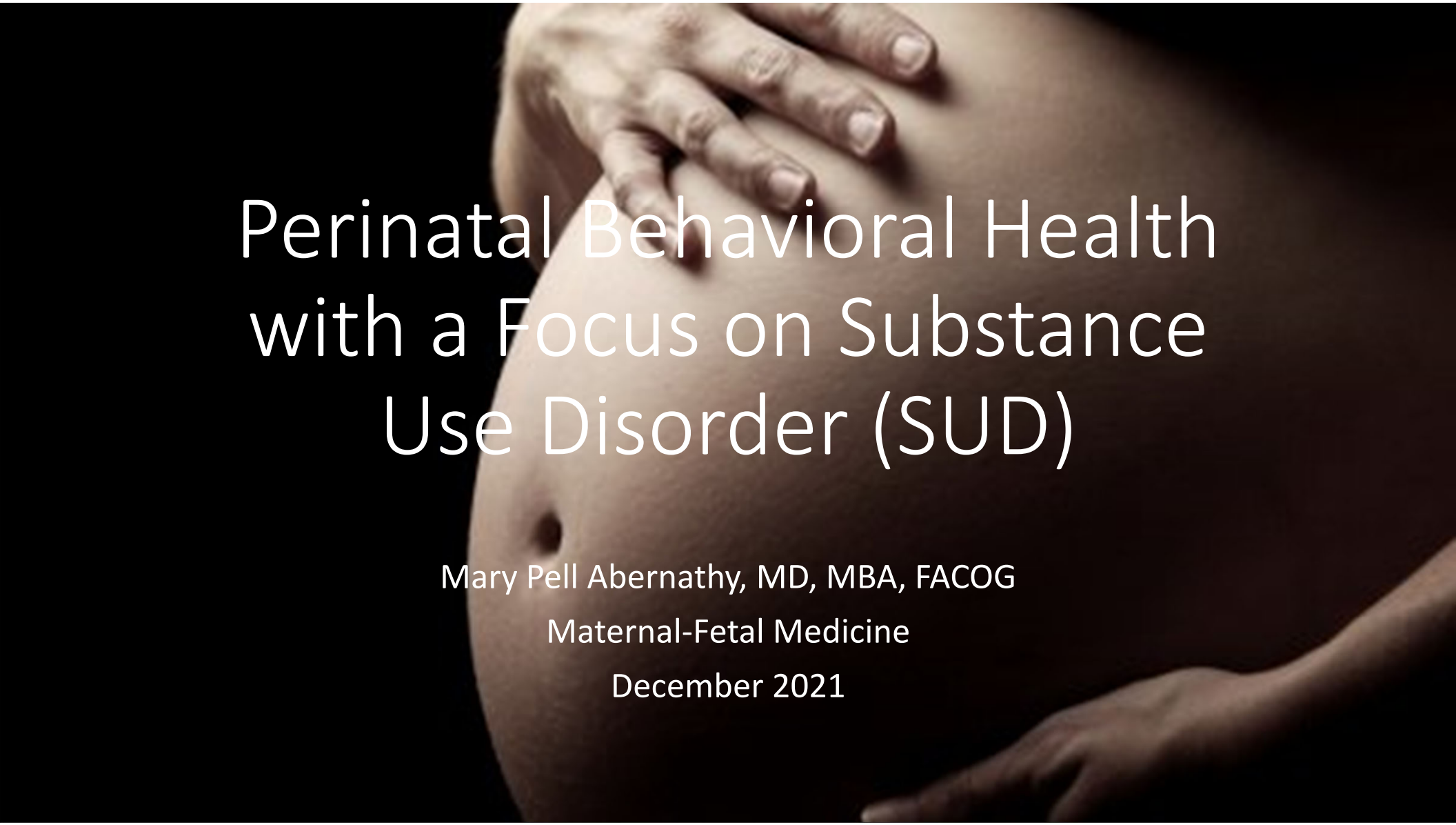


Perinatal Behavioral Health with a Focus on Substance Use Disorder (SUD)

Mary Pell Abernathy, MD, MBA, FACOG
Maternal-Fetal Medicine
December 2021

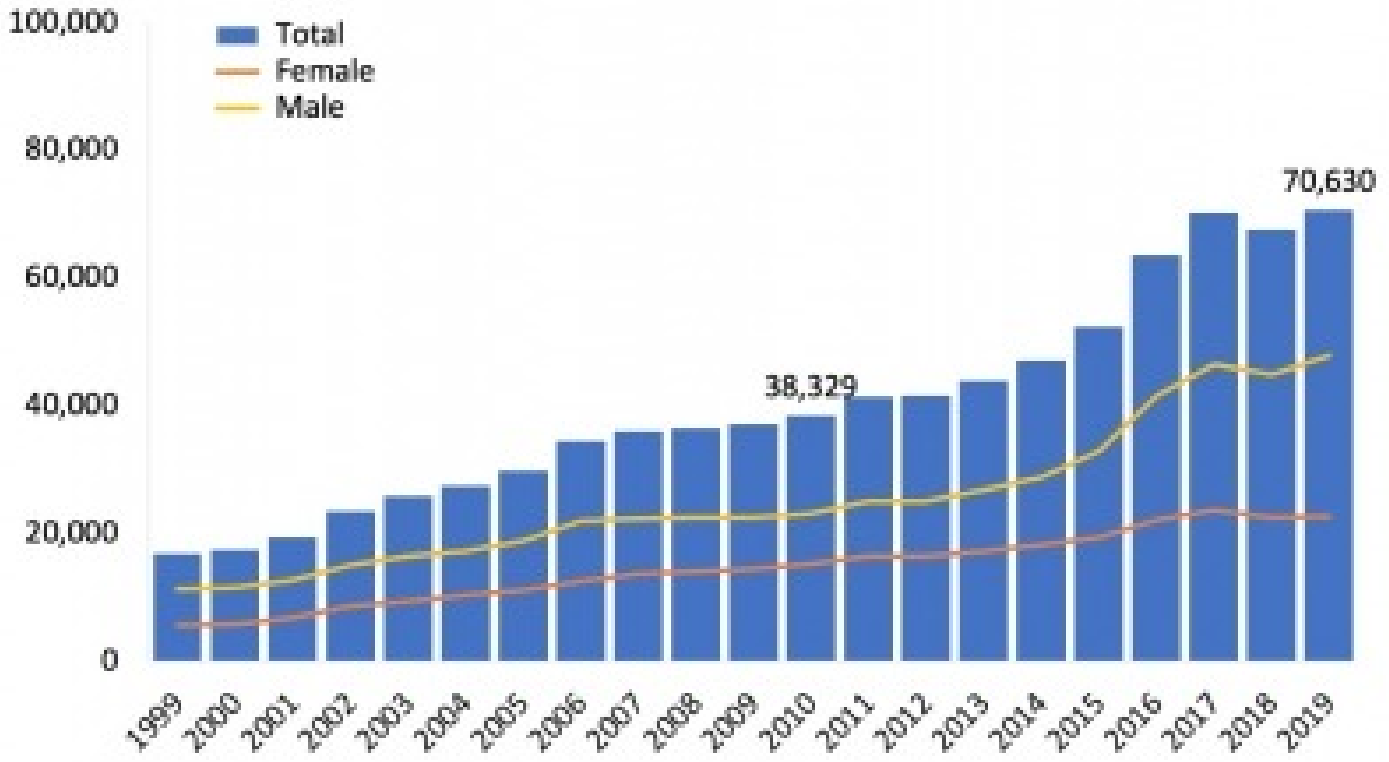
Disclosures

- Roche consultant: risks have been mitigated by CME sponsor.

Key takeaway points…

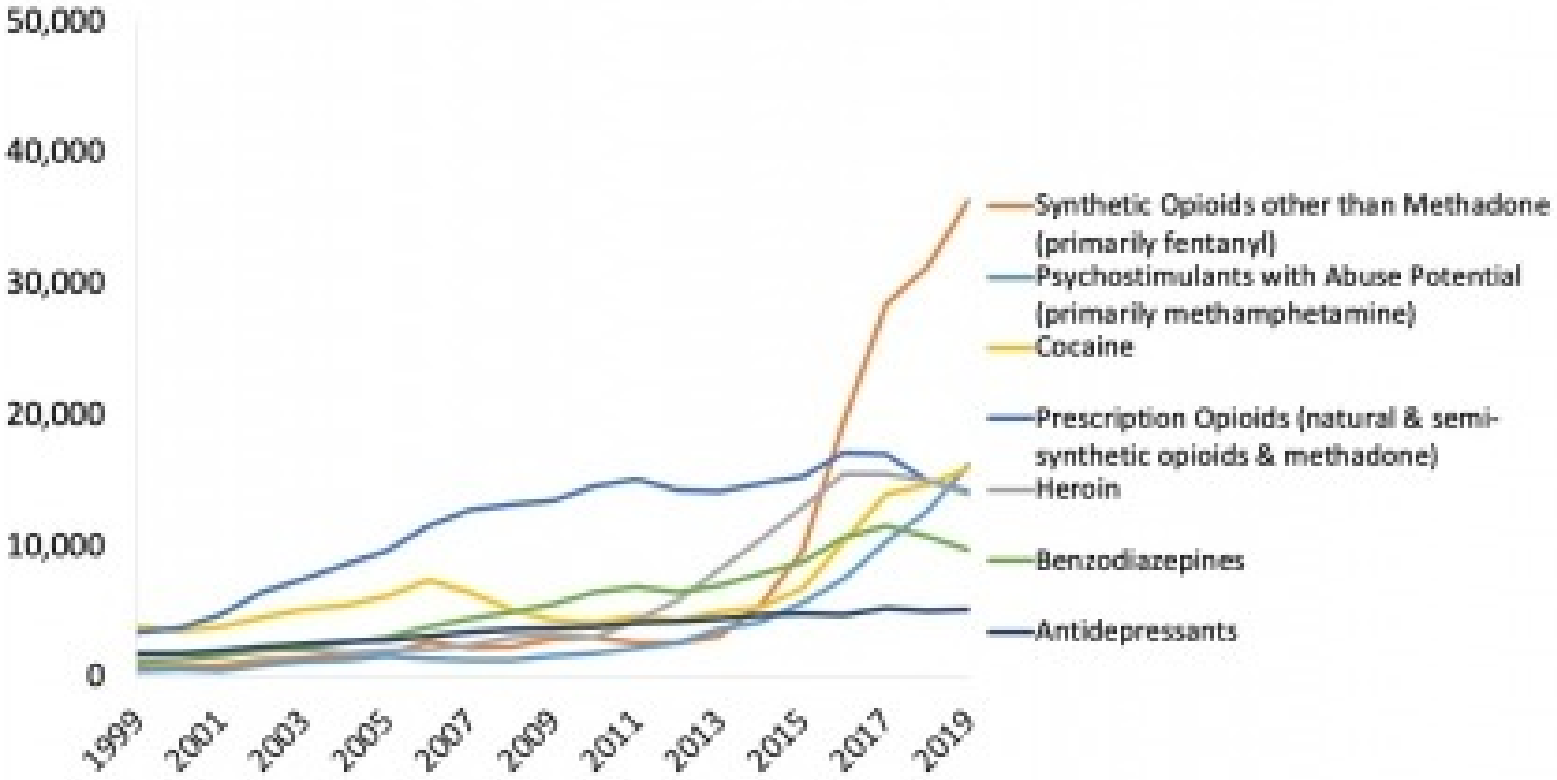
- Accidental drug overdose is the leading cause of maternal mortality in Indiana.
- Many women use illicit substances and nonprescribed medications to self-medicate for behavioral health problems due to lack of access.
- Substance abuse identified during pregnancy is a window of opportunity to educate and change lives of women and families.
- Universal **verbal** screening, with reflex urine testing, referral and **treatment** for pregnant women with substance use disorder is recommended with referral to treatment programs specific for pregnant women.
- Maintenance therapy rather than detox during pregnancy is recommended for Opioid Use Disorder (OUD).

Figure 1. National Drug-Involved Overdose Deaths*
Number Among All Ages, by Gender, 1999-2019



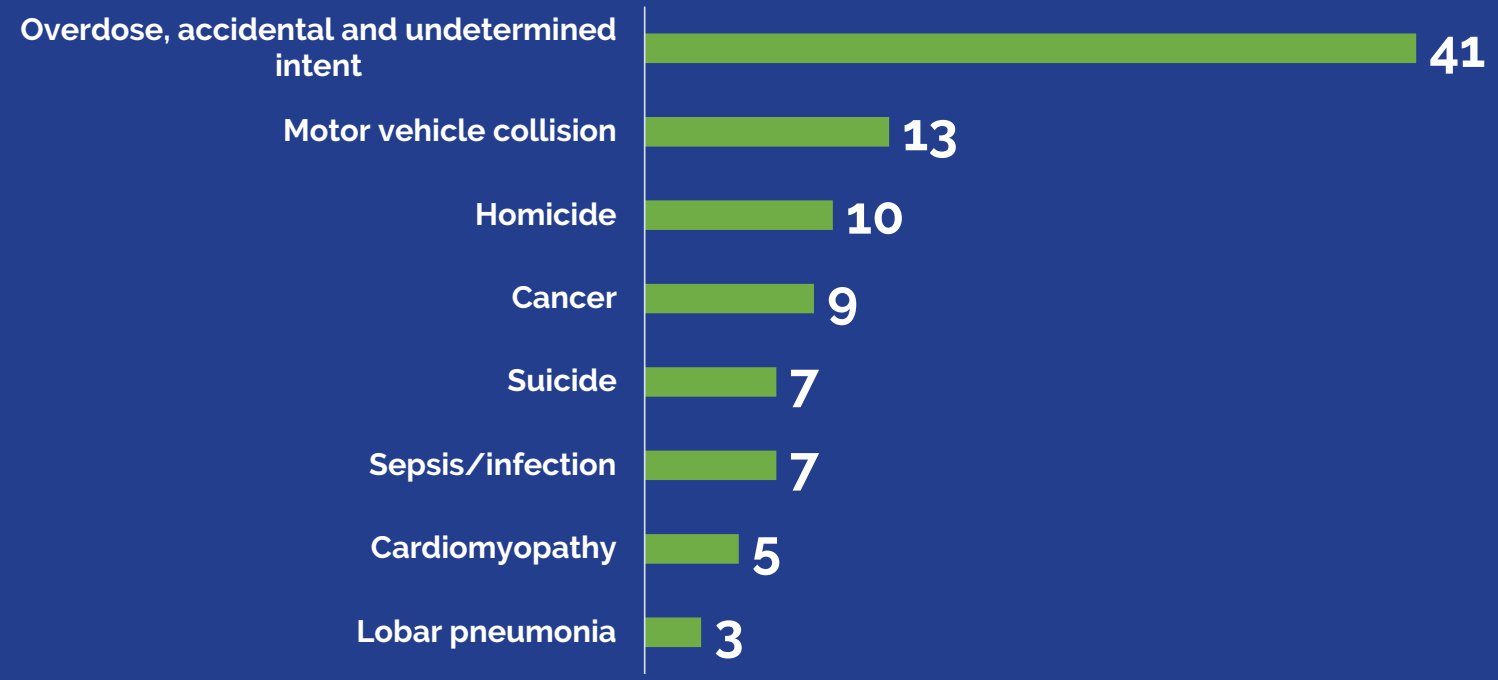
*Includes deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision.
Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2019 on CDC WONDER Online Database, released 12/2020.

Figure 2. National Drug-Involved Overdose Deaths*, Number Among All Ages, 1999-2019



*Includes deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision.
Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2019 on CDC WONDER Online Database, released 12/2020.

2018-2019 Underlying Cause of Death: Pregnancy-Associated Deaths (n=123)



Indiana Department of Health

How prevalent are mental health conditions in pregnant women?

- 1 in 6 adults will experience a major depressive disorder (MDD) in their life
- Median age of onset is 26-32 years
- Depression more frequent in women with up to 1 in 3 women experiencing MDD in their lifetime
- Prevalence of perinatal mood and anxiety disorder (PMAD) increased from 18.4/1000 deliveries (2006) to 40.4/1000 deliveries (2014). (McKee, et al, BMC Women's Health 2020)
- Severe mental illness also doubled in the same time period.
- Women without access to behavioral health providers will self-medicate.

How can we assess the risk of SUD in pregnancy?

- Validated screening tests are readily available
  - NIDA Quick Screen
  - IHR 5Ps
  - CRAFFT

- These VERBAL screens indicate the need for brief intervention and urine drug screen.
- The goal for most providers is IDENTIFY the potential for SUD and refer for treatment.

Universal VERBAL Screening: recommended

- *Clear distinction between voluntary report, verbal screening and urine drug screening*
- *Universal VERBAL Screening* means that every obstetrical patient is asked about substance use.
  - At the first prenatal or intake visit, and
  - At least once per trimester thereafter.

ACOG Committee Opinion No. 422, December 2008.

Why Universal Verbal Screening?
Pregnancy Enhances Recovery

- Pregnancy makes a difference in long-term recovery.
- After one year of treatment:
  - 65.7% of women who entered MAT-treatment program while pregnant used no other drugs, while
  - Only 27.7% of non-pregnant women in a MAT-treatment program remained drug free. ($p<0.0005$)

Early universal screening, brief intervention and referral to treatment for pregnant women with OUD improve maternal and infant outcomes.

- Peles E, Adelson M. Gender Differences and Pregnant Women in a Methadone Maintenance Treatment (MMT) Clinic. *J Addictive Diseases* 2006; 25: 39-45.

Resistance to Screening

Myths

- Don’t know how
- Too much time
- Won’t make a difference.
- Lack of referral resources
- Affects only inner-city poor on crack cocaine and rural women on crystal meth.

Reality

- Easy to master
- Takes less than 5 min.
- Up to 85% will “clean up”
- Referral resources are available
- It is just as common in middle- and upper-class women living in the suburbs.

NIDA QUICK SCREEN

Massachusetts Child Psychiatry Access Program
MCPAP For Moms

SUD2

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					

Institute for Health and Recovery Integrated Screening Tool (5P's)

- Use scripting:
  - Intro: **Women's health can be affected by emotional problems, alcohol, tobacco, drug use and domestic violence. Women's health is also affected when those same problems are present in those people close to us.**

  - Closing: **For the best health of mothers and babies, we strongly recommend that pregnant women, or those planning to become pregnant, do not use alcohol, illegal drugs or tobacco. Safe levels of usage have not been determined.**

PATIENT SCREENING INFORMATION

Parents Did any of your parents have a problem with alcohol or drug use?	**YES**				**NO**
Peers Do any of your friends have a problem with alcohol or other drug use?	**YES**				**NO**
Partner Does your partner have a problem with alcohol or other drug use?			**YES**		**NO**
Violence Are you feeling at all unsafe in any way in your relationship with your current partner?		**YES**			**NO**
Emotional Health Over the last few weeks, has worry, anxiety, depression or sadness made it difficult for you to do your work, get along with people or take care of things at home?				**YES**	**NO**
Past In the past, have you had difficulties in your life due to alcohol or other drugs, including prescription medications?			**YES**		**NO**
Present In the past month, have you drunk any alcohol or used other drugs? 1. How many **days per month** do you drink?_____ 2. How many **drinks** on **any given day**? _____ 3. How often did you have **4 or more drinks per day** in the last **month**? ____ 4. In the past month have you taken any prescription drugs?			**YES**		**NO**
Smoking Have you smoked any cigarettes in the past three months?			**YES**		**NO**
Please provide additional details for any "yes" responses:	↓ Review risk	↓ Review domestic violence resources	↓ Review substance use, set healthy goals	↓ Consider mental evaluation	

ADVICE FOR BRIEF INTERVENTION

	Y	N	N/A
Did you **S**tate your medical concern?			
Did you **A**dvise to abstain or reduce use?			
Did you **C**heck patient's reaction?			
Did you **R**efer for future assessment?			

At Risk Drinking	
Non-Pregnant	**Pregnant/Planning Pregnancy**
7+ drinks/week 3+ drinks/day	**Any Use is Risky Drinking**

CRAFFT

(Substance Abuse Screen for Adolescents and Young Adults)

C: Have you ever driven in a **CAR** driven by someone (including yourself) who was high or had been using alcohol or drugs?

R: Do you ever use alcohol or drugs to **RELAX**, feel better about yourself, or fit in?

A: Do you ever use alcohol or drugs while you are by yourself or **ALONE**?

F: Do you ever **FORGET** things you did while you are using alcohol or drugs?

F: Do your **FAMILY or FRIENDS** ever tell you that you should cut down on your drinking or drug use?

T: Have you ever gotten in **TROUBLE** while you were using alcohol or drugs?

(two or more positive answers indicates further assessment)

www.ceasar.org/CRAFFT/pdf/CRAFFT_English.pdf Retrieved Feb 2012.

When the Screen is positive:

- Patient is at risk for substance use
- Does not mean she is using.
- **Urine Drug screen indicated (reflex test).**
- Brief Intervention is indicated.
- Re-evaluate in one-two weeks.
- If no change in behavior, refer to specific treatment program.

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.

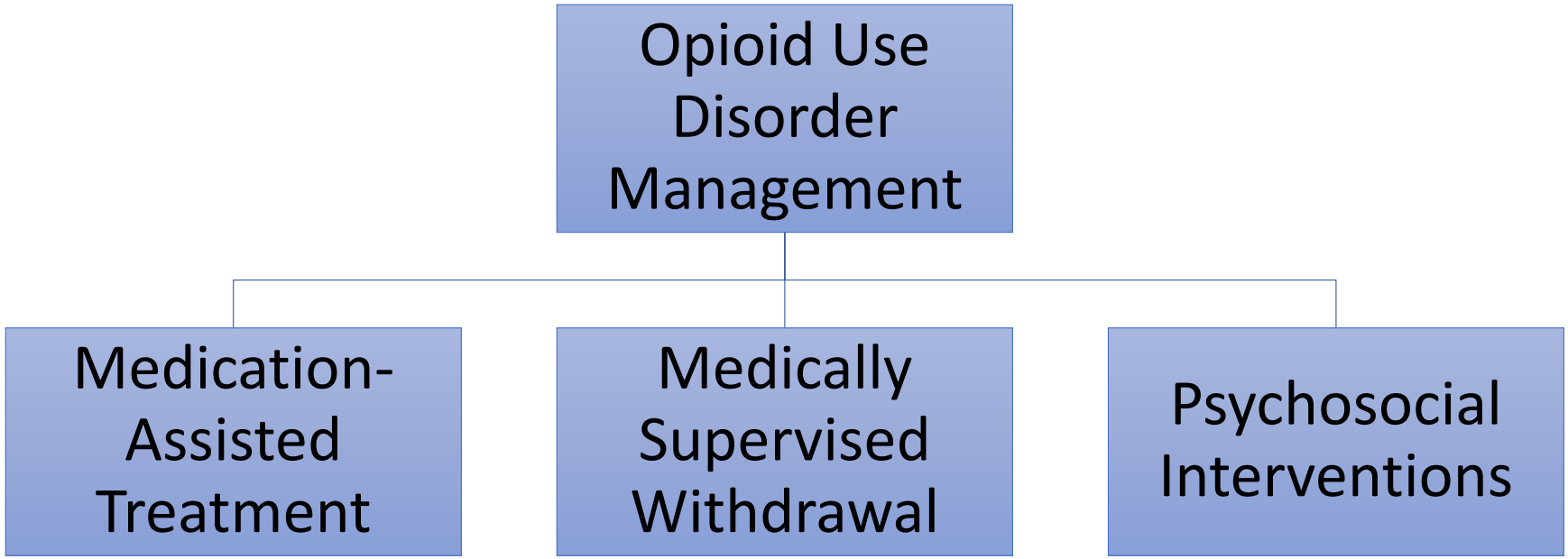
If the urine drug test is inconsistent with the patient's report, order confirmatory testing (e.g., Gas Chromatography/Mass Spectrometry – a.k.a. GC/MS).

MCPAP for Moms Website, 2021

Barriers to treatment for both SUD and behavioral health conditions

- **Stigma associated with both SUD and mental health conditions**
- **Lack of access for treatment of mental health conditions leads to use of nonprescription medications.**
- **Cost of treatment**
- **Lack of recognition by patients and providers**

Evidence based practices for SUD
Treatment for Opioid Use Disorder (OUD) in Pregnancy



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.

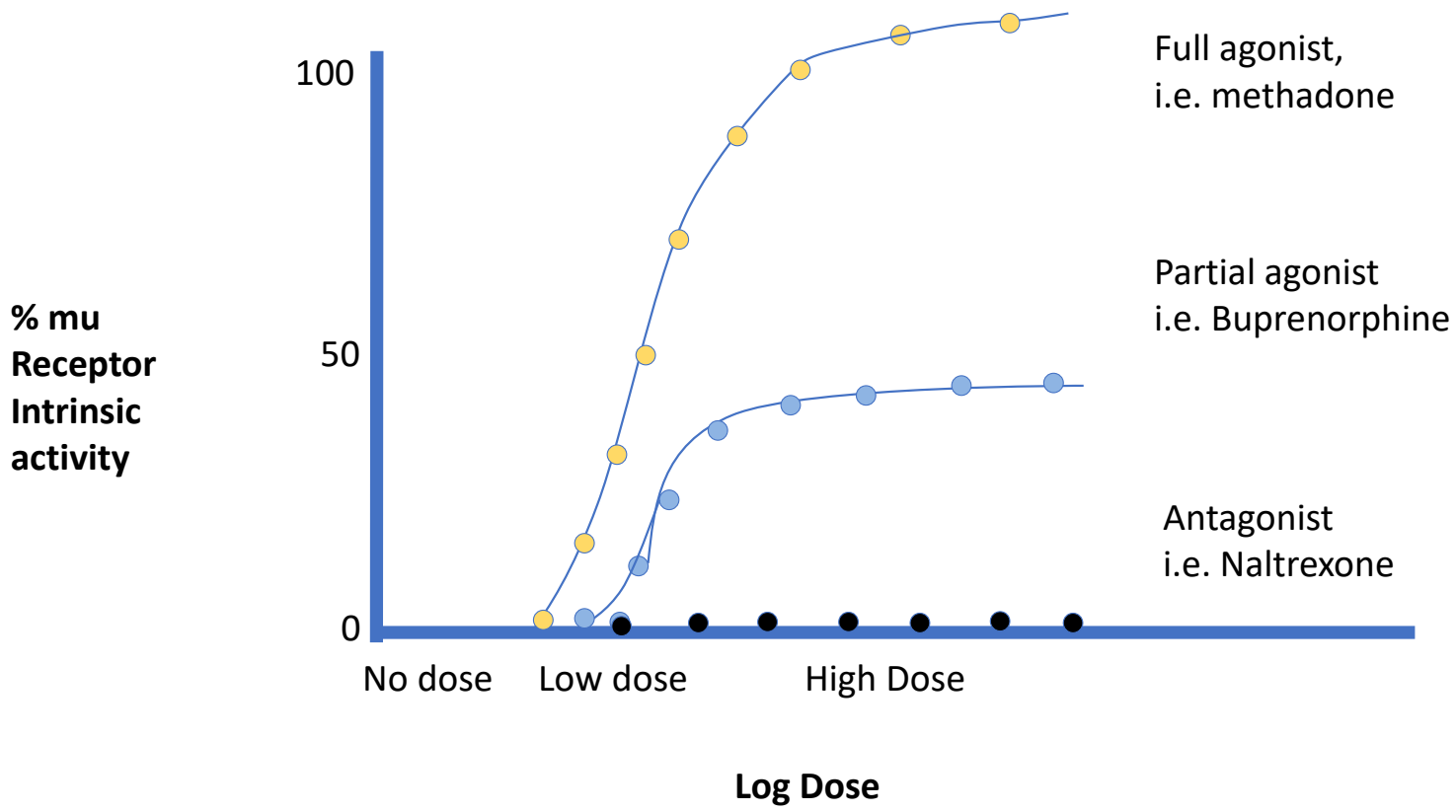
NO

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.

Dose-response effect



Wright, T. ACOG & ASAM Buprenorphine Course. 2016.

Weaning or ‘detox’ not generally recommended in pregnancy

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

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*).

General Principles of pain control during and after pregnancy

- Avoid partial agonists (butorphanol, nalbuphine, pentazocine) as they can precipitate withdrawal.
- If using narcotics patients on buprenorphine may require a higher dose due to blocking effects.
- Consider split dosing to help with pain relief or even adding an extra dose (TID).
- Optimize non-opioid medical pain relief options (NSAIDs, acetaminophen, regional blocks, ketamine, etc.)
- Optimize nonmedical treatment options (meditation, hypnosis, massage, mindfulness, acupuncture, PT, CBT, etc.)

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.

MCPAP for Moms website, 2021

Avoid Opiate Withdrawal or WEAN during Pregnancy

- High rate of preterm labor - 41%
- Increased abruption - 13%
- Low Birth weight – 27%
- Current recommendation is to avoid withdrawal during pregnancy
- This includes “detoxification” or weaning during pregnancy.
- The risk of adverse events from withdrawal is far greater than the treatment of neonatal abstinence.

- Lam SK, To WK, Duthie SJ, Ma HK. Narcotic addiction in pregnancy with adverse maternal and perinatal outcome. Aust N Z J Obstet Gynaecol 1992 Aug;32(3):216-21.

PSYCHOSOCIAL INTERVENTIONS

- **Brief interventions by OB providers using motivational enhancement**
- Indiana Pregnancy Promise Program (FSSA)
- Self-Help Groups- Narcotics Anonymous, IOP (Intensive Outpatient Therapy), public for-profit entities
- Behavioral Health counseling by therapists, psychiatrists, LCSW
- Drug Courts, Family Courts
- Residential Treatment Programs including Volunteers of America Fresh Start Recovery Program, Next Step Community, Dove Recovery House for Women, etc.

Indiana Pregnancy Promise Program

Promoting Recovery from Opioid use: Maternal Infant Support and Engagement

What is the Indiana Pregnancy Promise Program?

The Indiana Pregnancy Promise Program is a free, voluntary program for pregnant Medicaid members who use opioids or have used opioids in the past. The goals of the Pregnancy Promise Program are for participants to:

- Enter prenatal care
- Access opioid treatment needed to achieve sustained recovery
- Receive ongoing support and follow-up care for the mother and infant during and after pregnancy
- Provide hope and set a strong foundation for the future

Why is the Indiana Pregnancy Promise Program important?

- Opioid use disorder during pregnancy is increasing in Indiana and nationwide
- Treatment of opioid use disorder during pregnancy has a high rate of success
- Treating opioid use during pregnancy reduces the risks of harmful effects to mothers and infants

Who can participate?

The Pregnancy Promise Program is available to pregnant individuals in the state of Indiana. To be eligible, participants must meet the following criteria:

- Pregnant or within 90 days of the end of pregnancy
- Identify as having current or previous opioid use
- Be eligible for or receive Medicaid health coverage

What are the Pregnancy Promise Program benefits?

Connection: Participants in the Pregnancy Promise Program will be matched with a case manager. Case managers will offer confidential support during enrollment to be sure parents and infants receive the care and resources they need during and after pregnancy to be healthy and well.

Coordination: Pregnancy Promise Program case managers will work with participants and their team of doctors and providers to coordinate care and identify community resources for families.

Prevention: By connecting pregnant individuals with health care and treatment as early as possible, the Pregnancy Promise Program aims to reduce and prevent the negative impacts of opioid use to the parent and child.

To make a referral for yourself or someone you know, visit www.PregnancyPromise.in.gov, email PregnancyPromise@fssa.in.gov, call 317-234-5336 or call toll-free 888-467-2717.

Indiana Family & Social Services Administration

www.PregnancyPromise.in.gov
Toll-Free 888-467-2717 | 317-234-5336
PregnancyPromise@fssa.in.gov

Present Day Care for OUD in Pregnancy in Indiana

- Specialized treatment centers are available: residential, inpatient and outpatient.
- Multidisciplinary approach involves obstetric providers, nursing, mental health providers, social work and pediatrics
- Medication-Assisted therapy (MAT) is standard of care for OUD
- Multidisciplinary team (mental health, SW, nursing, insurance care managers, and OB providers).
- Model of infant care with mother/baby dyad reduces NAS (smoking cessation, breastfeeding, low stim environment)

Key takeaway points…

- Accidental drug overdose is the leading cause of maternal mortality in Indiana.
- Many women use illicit substances and nonprescribed medications to self-medicate for behavioral health problems.
- Substance abuse identified during pregnancy is a window of opportunity to educate and change lives of women and families.
- Universal **verbal** screening, with reflex urine testing, referral and **treatment** for pregnant women with substance use disorder is recommended with referral to treatment programs specific for pregnant women. Treatment programs are available for pregnant women in Indiana.
- Maintenance therapy rather than detox during pregnancy is recommended for Opioid Use Disorder (OUD).

Resources

- MCPAP: Massachusetts Child Psychiatry Access Program for Moms
- ACOG: Opioid use and opioid use disorder in pregnancy. Committee Opinion No. 711. American College of Obstetricians and Gynecologists. Obstet Gynecol 2017;130:e81–94
- ASAM: www.asam.org or SAMHSA: ww.samhsa.gov
- IN.gov: Perinatal Substance Use Bundle https://www.in.gov/laboroflove call or email IN Dept of Health
- www.PregnancyPromise.in.gov or email PregnancyPromise@fssa.in.gov or 888-467-2717

Thank you!

Contact information:

Mary Pell Abernathy, MD

mabernat@uhhg.org

317-730-0598