Management of Opioid Use Disorder in Pregnancy and Postpartum: A How-To Guide for Clinicians

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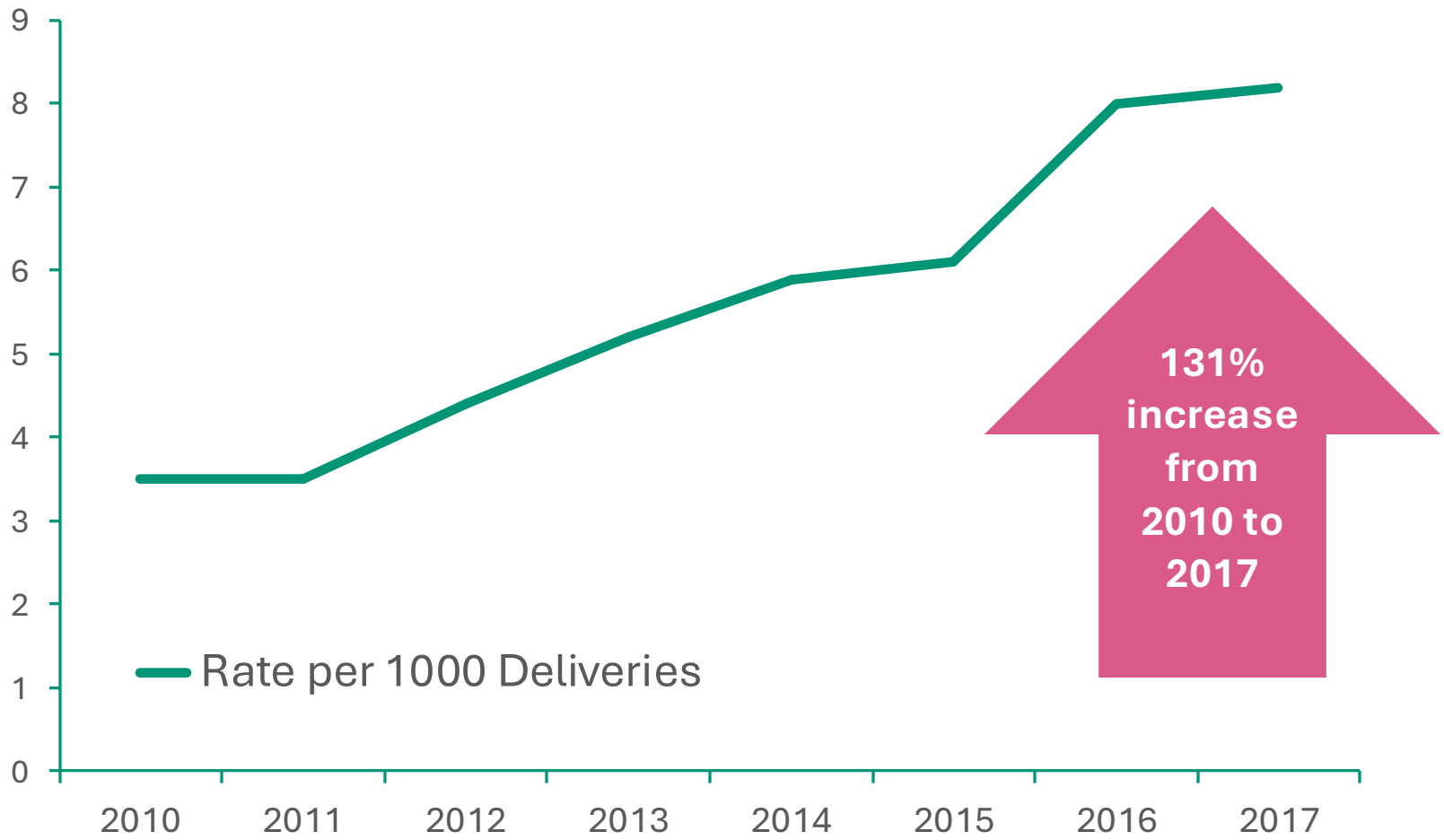
Mental Health and Substance Use for Moms

Maternal Opioid-related Diagnosis: 2010-2017



JAMA. 2021;325(2):146-155

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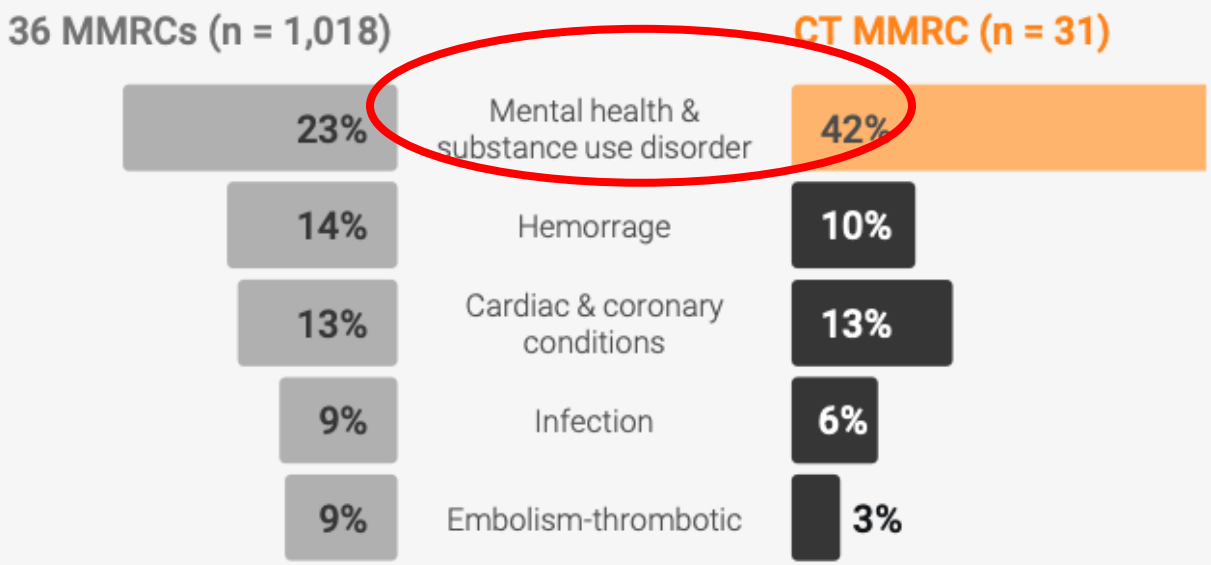
Leading Underlying Causes of Pregnancy-related Deaths

Mental health conditions, including substance use disorder, were the leading underlying causes of death both in Connecticut and in 36 US states that contributed data to the CDC's analysis of pregnancy-related deaths.



Data Sources: Connecticut Maternal Mortality Review Information Application (CT-MMRIA), 2015-2020 and data from Maternal Mortality Review Committees in 36 US states, 2017-2019.

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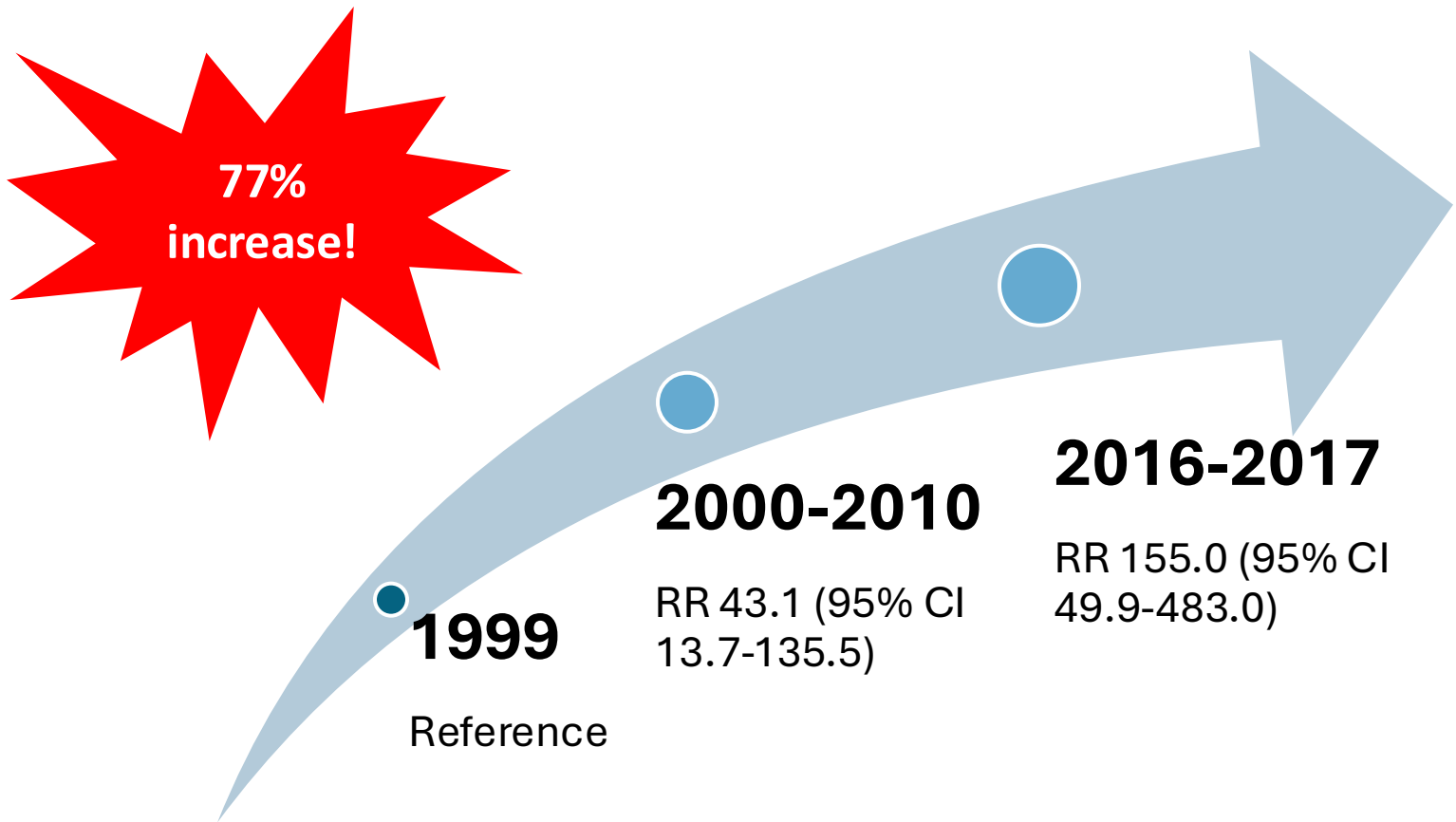
OUD-related Maternal Deaths 1999-2017



Mitra A et al., Obstet Gynecol. 2020;135:56S.

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MOUD Treatment During Pregnancy

Advantages of MOUD treatment

- Increases adherence to prenatal care
- Reduces illicit drug use
- Reduces infection exposure secondary to IVDU
- Improves maternal nutrition and infant birth weight

★ Despite recent evidence suggesting fetal safety of medically assisted opioid withdrawal in pregnancy, studies have found low abstinence and high relapse rates (59-99%)

Bell et al, Am J Obstet Gynecol. 2016;215(3):374
Jones et al, Am J Addict. 2008;17:372–86
Mozurkewich et al, Obstet Gynecol Clin N Am. 2014;41:241–53

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OUD Treatment in Pregnancy

- There is general agreement that women with opioid use disorder should remain on medication for opioid use disorder (MOUD)

- Some consensus that total withdrawal from opiates should be limited to 2nd trimester

- Methadone is still considered the gold standard for treatment of those who are pregnant and have an opioid use disorder

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Use of Methadone in Pregnancy

- Protects against “fetal withdrawal”
- Associated with increases in birth weight
- Decreases craving for other drugs
- 90% bioavailable but half life decreases across pregnancy
- May need to be increased starting in the 2rd trimester
- Use of other drugs and methadone may have worsened outcomes

Hulse et al, Addiction, 1997; 92:1571-1579
Johnson et al, Addiction, 2003;98:785-789
Archie et al., Curr Opin Obstet Gyn, 1998;10:435-440

Buprenorphine in Pregnancy

Established use in pregnancy after 2010 (MOTHER Study)

Buprenorphine + naloxone = suboxone

- Limited data in pregnancy but appears safe
- No difference in neonatal outcomes compared to buprenorphine alone

Typically requires 16 mg/d or higher

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Suboxone Use in Pregnancy

- Buprenorphine + Naloxone
  - Formulation decreases the risk of diversion and misuse
- Limited data in pregnancy
- Systematic Review and Meta-analysis – Link et al
  - 5 retrospective cohort studies (2 US, 1 Canada/Norway/Czech Republic)
  - 291 suboxone vs 361 buprenorphine vs 382 methadone vs 159 opioids/other vs 682 controls

Link HM, et al., Am J Obstet Gynecol MFM. 2020;2(3):100179.
doi: 10.1016/j.ajogmf.2020.100179.

Methadone vs. Buprenorphine

Advantages	Methadone	Buprenorphine
Reduces cravings for opioids	x	x
Prevents withdrawal	x	x
Blocks the effects of other opioids	x	x
Promotes increased health	x	x
Higher treatment retention	x	
Lower risk of overdose, fewer drug interactions, shorter NOWS		x
Office-based treatment		x

Regardless of treatment concurrent smoking increases risk and severity of NOWS

Jones HE, et al. *Drug Alcohol Depend.* 2013; 131(3):271-7.

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Naltrexone in Pregnancy

- Opiate agonist (oral/injectable/long-term implant)
- Limited data in pregnancy – appears safe
- Oral administration not superior to placebo
- Not typically initiated in pregnancy as detoxification must be achieved first → withdrawal symptoms → fetal stress
- Due to mechanism of action can be difficult to manage pain in labor/cesarean section and postpartum

Neonatal Opioid Withdrawal Syndrome (NOWS)

Occurs in 45%-95% of exposed infants

Seizures

Hyperreflexia

Vomiting

Tremors

Irritability

Disorganized sleep

Increased sweating

Poor feeding and sucking

Loose stools and dehydration

Excessive or high-pitched crying

Yawning, stuffy nose, or sneezing

Patrick et al., JAMA, 2012
Committee on Drugs, Pediatrics, 1998;101:1079-1086
Ballard, J Perinat Neonat Nurs, 2002;15:76-85

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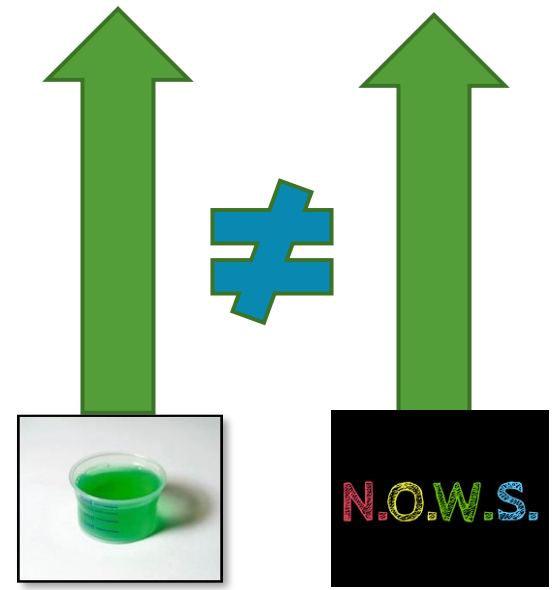
MOUD Dosing in Pregnancy

- MOUD dose is not consistently related to NOWS severity
- Will need to increase MOUD dose as pregnancy progresses
- Recommend **split dosing** starting in 2nd trimester
  - Maternal Benefits
    - ✓ Increase drug negative urines during treatment
    - ✓ Increased adherence with treatment
    - ✓ Decrease withdrawal symptoms
  - Fetal Benefits
    - ✓ Minimizes the reduction in breathing and movement
    - ✓ Fetal movement-fetal heart rate coupling less suppressed



Jansson et al., J Opioid Manag. 2009; 5(1): 47–55;
McCarthy et al., J Addict Med. 2018;12(3):241-246.

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Tapering Dosing in Pregnancy

- Increased risk of relapse
- Fewer obstetric visits attended
- Individualized counseling between provider and patient
- No sizeable studies to date documenting fetal outcomes during any medication taper
- More data is needed

Transitioning Medications in Pregnancy

- To initiate buprenorphine must put mother in a state of slight withdrawal
  - Could lead to increased fetal stress due to withdrawal symptoms
  - Could lead to increased relapse risk – especially if done as an outpatient
- MOTHER study showed decreased patient retention in buprenorphine arm
  - Majority of these women were transitioned from methadone to this arm as part of randomization – unclear what role this played
- Not recommended as standard of care at this time but if attempted should be done as an inpatient

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Outpatient Buprenorphine Initiation

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Considerations for your practice

- Considerations for your practice
- Informed Consent
- Writing a prescription
- Her first dose

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Considerations for your practice

- Patient selection
  - Who will you treat?
  - Who will cover off-hours?
  - Who will prepare patient for the visit?
  - What information can be gathered in advance?
  - What information can be given to the patient in advance?

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Considerations for your practice

- Observed or Unobserved starts
  - For observed starts: who will perform tasks?
  - For home starts: who will perform follow-up calls? Take off-hours calls.

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Informed Consent

- Risks: NOWS, overdose when mixed, precipitated withdrawal
- Office policies: early refills, conditions for rx, safe storage
- Alternatives: methadone, vivitrol, nothing

Consider including in a treatment agreement

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Writing a Prescription

Buprenorphine / naloxone 8mg / 2mg SL film

One film SL bid x14d

#28 (twenty eight)

XDEA: XC1234567

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Writing another Prescription

Buprenorphine / naloxone 8mg / 2mg SL film

16mg daily SL in divided doses x14 days

#28 (twenty eight)

XDEA: XC1234567

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The first dose

Office based or Home start?

Goal: Balance safe initiation of medication with overall patient safety

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The first dose

Observed Office Based Induction	Unobserved Home Based Induction
Insurance prior authorization	Removes delay/barrier to recovery
Confirmation of use/abstinence	Patient comfort
Informed consent & options counseling	Patient dictates timing of induction
Quick treatment of precipitated withdrawal	Avoidance of precipitated withdrawal
Requires patient to tailor and time use	Possible patient attrition & diversion
Delay to treatment	Removes relationship building opportunity
Can create barrier to care (transportation, work)	Requires a home

The first dose: Office based

- Patient comes to office 1 hour before appointment, picks up pre-printed Rx for 1 week supply of suboxone at expected daily dose
- Fills Rx & returns to office for visit
- Staff scores on COWS scale
- Staff reviews consent
- Patient places film under tongue, allows to dissolve
- Staff checks at 10 min mark, checks under patient tongue, gives further instruction
- Staff checks at 20 min mark. If patient uncomfortable, COWS performed. If HIGHER, patient taken to ER for precipitated withdrawal.
- At 60 minutes, COWS again performed. If HIGHER, patient taken to ER for precipitated withdrawal. If lower than starting COWS, patient discharged with follow-up

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Buprenorphine Initiation Pregnancy – Outpatient*

Mild-moderate withdrawal symptoms

COWS 10-12

*For patients who are less than 24 wks pregnant, after 24 wks should be done with fetal monitoring

4 mg under close observation

Check patient after 20 min, if uncomfortable perform COWS

- If COWS >15, assume precipitated withdrawal
- Start clonidine 0.1 mg PO and transfer to ED

A

If after 60 min COWS >15 start clonidine 0.1 mg PO and transfer to ED

B

If after 60 min COWS <15 and patient comfortable give another 2-4 mg

B

Wait 20-30 min and reassess:

- If still symptomatic and has not exceeded 8 mg total, can give additional 2-4 mg
- If patient has already reached 12 mg total treat breakthrough symptoms with PRN medications for symptomatic management

C

If after 60 min COWS lower than starting dose, patient can go home

Adjunctive therapies for symptoms

- Anxiety or insomnia: hydoxyzine 50 mg q8h PRN
- Extreme agitation: benadryl 50 mg once, haldol 2 mg PO once
- Abdominal cramping: dicyclomine 20 mg q8h PRN
- Pain: acetaminophen 650 mg q6h PRN
- Diarrhea: loperamide 4 mg once followed by loperamide 2 mg PRN after each loose bowel movement to a maximum dose of 16 mg/24 hours
- Nausea: ondansetron PO 4 mg q8h PRN
- Reflux:
  - Calcium carbonate (TUMs)
  - Maalox
  - Famotidine
- Respiratory depression: naloxone 0.4 mg IM q3min PRN respiratory depression to max of 1.2 mg

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The first dose: Home unobserved

Example:

- Patient comes to office for appointment
- Staff reviews consent
- Staff reviews home-start worksheet
- Rx given to patient (tailored to expected use)
- Short term follow-up arranged
- Staff calls day of expected start
- Worksheet reviewed at next visit, Rx adjusted PRN,

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The first dose: Home unobserved

IT MATTTRs™

A Patient's Guide to Starting Buprenorphine at Home

PREPARATION

Receiving Medication Assisted Treatment (MAT) with Buprenorphone

Medication assisted treatment (MAT) with buprenorphine is a safe and effective method to help people with an opioid use disorder stop using prescription pain medications, heroin, and other opioids. There are three main phases of MAT: induction (first 1-2 days), stabilization (several weeks), and maintenance (as long as it takes). Before you start treatment, be sure to talk with your health care provider about your plans for treatment.

Your care team should schedule an MAT Procedure Review Appointment with you. This is a great time to discuss your decision to receive MAT, your goals and motivations, concerns, and receive important information. Before starting treatment, your health care team will also conduct a physical evaluation and some lab tests.

Home or Doctor's Office?

This process of getting started on buprenorphine is called Induction. You can be at your doctor's office to get started, or you can do this at home. Talk with your doctor and care team about which option is better for you. There are pros and cons for both options. Which option do you prefer?

Induction at the Doctor's Office		Induction at Home	
Pros	**Cons**	**Pros**	**Cons**
• Your care team is there to check on you and answer questions. • You can build a connection and relationships with your care team. • In some practices, a peer counselor or a behavioral health provider might be there to talk with you.	• You might not be as comfortable as home. • Someone should drive you there and home, ideally.	• You might be more comfortable at home. • You do not need to drive anywhere.	• Waiting to be in withdrawal before taking your first dose of buprenorphine can be difficult. If you take your first dose too soon, you increase the chance of an intense withdrawal that comes on very quickly (precipitated withdrawal). • Your health care team is not there to check on you and talk with you.

When to Stop Taking Opioids

Your treatment will more successful if you prepare for your first dose of buprenorphine (or induction). Before starting your medication, you will need to stop using opioids for a required period. This period of time when you are not using opioids protects you from undesirable side effects, which could delay you from feeling normal again. Be truthful with yourself and your health care team about when you last used opioids and what you used.

Type of Opioid	Examples	When to stop
Short-acting	Percocet, Vicodin (hydrocodone), Heroin	12-24 hours before first dose. *Example: Stop at Sunday at 12 noon for a Monday induction.*
Long-acting	Oxycontin, MS Contin/ Morphine, Methadone	• 36 hours before first dose for Oxycontin, Morphine • >48 hours for Methadone *Example: Stop at Saturday at 12 noon for a Monday induction*

MAT Prooedure Revlew Appolntment

Before you start taking buprenorphine and receiving MAT, you and your care team should meet for about 30 minutes. At this meeting, you will receive important information and be able to ask questions. This inoludes:

- ❑ Review and sign your Consent Form and Treatment Agreement Form.
- ❑ Disouss treatment steps, your goals and motivations, and buprenorphine information.
- ❑ Review the Subjeotive Opioid Withdrawal Soale (SOWS). This will ensure that you take your first dose of buprenorphine when it will be most effeotive. Your SOWS soore should be ≥17 before starting your first dose.
- ❑ Identify whom you should oall to oheok in.
- ❑ Map out a follow-up plan.
- ❑ Disouss safety, inoluding interaotion risks, avoid driving, safe storage

DAY 1

Cheoklist

Cheok the boxes next to eaoh step to help you traok your progress. Be patient — you're olose to feeling better!

Before taking your first dose, stop taking all opioids for 12-36 hours. You should feel pretty lousy, like having the flu. These symptoms are normal. You will feel better soon.

- ❑ Before your first dose of medioation, you should feel **at least three** of the following:
  - ○ Very restless, oan't sit still
  - ○ Twitohing, termors, or shaking
  - ○ Enlarged pupils
  - ○ Bad ohills or sweating
  - ○ Heavy yawning
  - ○ Joint and bone aohes
  - ○ Runny nose, tears in your eyes
  - ○ Goose flesh (or goose bumps)
  - ○ Cramps, nausea, vomiting or diarrhea
  - ○ Anxious or irritable
- ❑ Complete the SOWS. You need your SOWS soore to be ≥17 before taking your first dose of buprenorphine.

Sohedule

- ❑ **Take 4 mg** of buprenorphine under the tongue (tablet or film strip). (Half of an 8 mg tablet, or two 2 mg tablets). Usually one film strip.
- ❑ Put the tablet or film under your tongue. Do not swallow it. Buprenorphine does not work if swallowed.
- ❑ Wait an hour.
  - – If you feel fine, do not take any more medioation today. Reoord your total for the day dose below.
  - – If you oontinue to have withdrawal symptoms, take a seoond dose under your tongue (4 mg).
  - – If you are feeling worse than when you started, you might have preoipitated withdrawal. Call and talk with your provider about treatment options.
- ❑ Call your provider or offioe staff to oheok in.
- ❑ Wait 1-2 hours.
  - – If you feel fine, do not take any more medioation today. Reoord your total for the day dose below.
  - – If you oontinue to have withdrawal symptoms, take a third dose under your tongue (4 mg).
- ❑ Call your provider or offioe staff to oheok in.
- ❑ Wait 1-2 hours.
  - – If you feel fine, do not take any more medioation today. Reoord your total for the day dose below.
  - – If you oontinue to have withdrawal symptoms,

DAY 1 Dose Summary

Dose	Amount	Time
1st dose (if needed)	4 mg	
2nd dose (if needed)	mg	
3rd dose (if needed)	mg	
4th dose (if needed)	mg	
Total mg on Day 1	mg	

Do not take more than 16 mg total of buprenorphine on Day 1.
If you have taken up to 16mg of buprenorphine and still fee bad, call your doctor right away.

Congratulations! You are through Day 1. See instructions for Day 2 on the next page. You're doing great.

https://www.asam.org/docs/default-source/education-docs/unobserved-home-induction-patient-guide.pdf?sfvrsn=16224bc2_0

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Breastfeed while on MOUD

- The transfer of methadone and buprenorphine into mother's milk is minimal (<1% of maternal dosing)
- Concentration of methadone in mother's milk is unrelated to maternal dosing
  - Particularly low in infant peripheral serum
- Buprenorphine has low oral bioavailability
  - Compatible with breastfeeding

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Breastfeeding and NOWS

30% decrease in the development of NAS

50% decrease in neonatal hospital stay

Improved mother-infant bonding

Positive reinforcement for maternal recovery

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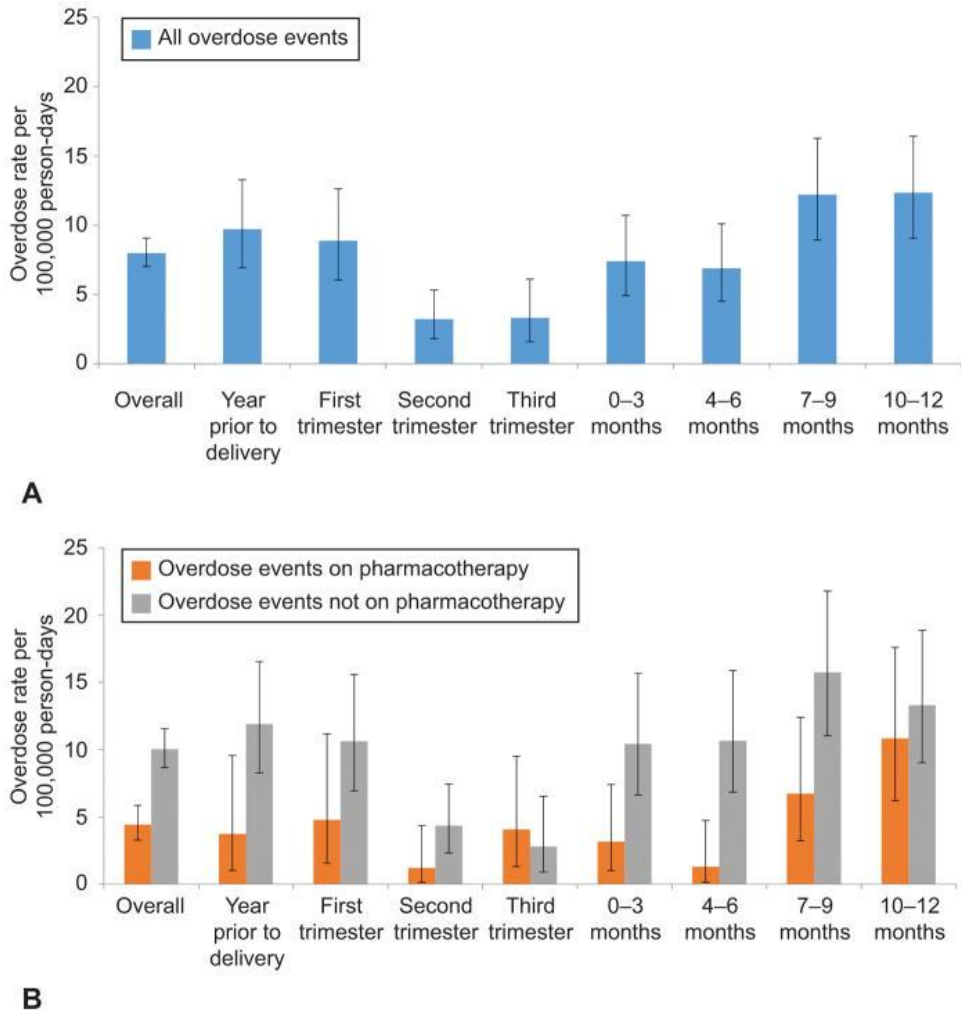
Why MOUD and Harm Reduction are Critical in Pregnant and Postpartum Individuals

Overdose Mortality in MA 2012-2014



Schiff DM et al., Obstet Gynecol. 2018;132(2):466-474.

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Key Reminders for Substance Use in Pregnancy

Harm Reduction

https://portal.ct.gov/-/media/DMHAS/Opioid-Resources/CT-Harm-Reduction-Resources-Flyer-2022.pdf

Family Care Plans

https://www.sepict.org/professionals/resources-for-professionals/

Link to SEPI-CT recorded training:
https://drive.google.com/file/d/1T7Qe4CJoq0-P4wjNINty7g8W-VsOgW3W/view?usp=sharing

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Resources

FOR ADDITIONAL SUPPORT FOR WOMEN

For additional community-based support for women who may be struggling with substance use, please contact the Women's REACH (Recovery, Engagement, Access, Coaching & Healing) program.

https://portal.ct.gov/DMHAS-REACH

HERE TO HELP

Or, for real time statewide residential Substance Use Disorder treatment bed availability please visit:

ctaddictionservices.com

THE PROUD PROGRAM

If you have additional questions about PROUD or any Substance Use Disorder treatment options for women please visit **http://www.CT.gov/DMHAS**

PROUD IS FUNDED BY

SAMHSA
Substance Abuse and Mental Health Services Administration

Wheeler
mccа
InterCommunity Health Care
Health Care for the Whole Person
dmhas
The Connecticut Women's Consortium
CHA CONNECTICUT HOSPITAL ASSOCIATION

PROUD
PARENTS RECOVERING FROM OPIOID USE DISORDERS

portal.ct.gov/PROUD

SEPI-CT
Substance Exposed Pregnancy Initiative of Connecticut

SUPPORTING PROVIDERS IN PROMOTING THE BEST OUTCOMES
for infants born substance-exposed and their families.

ABOUT US

The Substance Exposed Pregnancy Initiative of CT (SEPI-CT) works collaboratively with CT DCF and CT DMHAS to bring awareness to substance exposure during pregnancy, and to ensure families have access to the treatment, recovery, and support resources they need.

SEPI-CT provides free trainings and technical support to assist providers in:

- Meeting the legislative requirements of CAPTA (Child Abuse Prevention and Treatment Act)
- Creating Family Care Plans to ensure families have access to treatment, recovery, and support resources

FOR INDIVIDUALS AND FAMILIES

If you are pregnant and struggling with reducing or stopping your substance use, you are not alone. For impacted families in Connecticut, there are treatment, health, and recovery resources that can help.

OUR TRAININGS

The Evolution of CAPTA: Supporting Families Impacted by Substance Use

Presentation Contents:
- CAPTA/CARA Legislation
- CAPTA Notification
- DCF Report Considerations
- Family Care Plan Development
- Awareness of Stigma/Health Inequities
- Community Connections and Resources

CAPTA Notification Process

Presentation Contents:
- CAPTA Notification Requirements
- How to Access the Portal
- Screen by Screen Review of Notification
- DCF Report Considerations

Additional Presentations:
DMHAS Women's Services
DCF Mandated Reporter Training

FOR PROFESSIONALS

We provide resources that build your capacity to offer compassionate care to families and birthing people touched by prenatal substance exposure.

Ways to Contact SEPI-CT:

Mary Fitzgerald, SEPI-CT Family Care Plan Coordinator: mkfitzgerald@wheelerclinic.org

Pamela Mulready, SEPI-CT Project Manager: pamulready@wheelerclinic.org

Visit Our Website:
SEPICT.ORG

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Additional Resources

- DMHAS Women's Services brochure: https://portal.ct.gov/-/media/DMHAS/Publications/DMHAS-WS-Brochure--updated-2023.pdf

- DMHAS Access Line https://portal.ct.gov/DMHAS/Programs-and-Services/Finding-Services/Access-Line-for-Substance-Use-Treatment

- DMHAS SUD Tx Bed Availability https://www.ctaddictionservices.com/

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Questions