

PERINATAL SUBSTANCE USE DISORDER TOOLKIT

**A guide for the clinical care, coordination and support of
pregnant people with SUD**

Developed and distributed by the MaineHealth Child and Family Health Team



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Perinatal SUD Toolkit

Introduction

Welcome to the MaineHealth Perinatal Substance Use Disorder Toolkit. This toolkit is meant for care teams to use as a guide and reference for best practices in care for pregnant people with substance use disorder. This guide provides an overview of the disease journey, screening tools, workflow recommendations, and care coordination considerations. Substance use disorder is a complex disease, certainly further complicated by the additional vulnerability of pregnancy. We hope that this guide will be helpful in achieving better outcomes for practices, care teams and, most importantly, patients and their families.

Substance Use Disorder and Pregnancy

Substance Use Disorder (SUD) is a treatable, chronic medical disorder characterized by the compulsive and excessive use of substances and/or alcohol, despite the harmful impacts on a person's physical and emotional health as well as their relationships and their ability to achieve individual goals.

SUD does not discriminate and can affect people from all backgrounds and experiences; it can happen to anyone. According to the US CDC, 1 in 7 Americans aged 12 or older report experiencing SUD.¹ The causes of SUD are varied; factors include genetics as well as environmental factors that cause prolonged stress and traumatic experiences. ACEs (adverse childhood experiences) are known to cause delays in development and to, later in life, contribute to the development of other conditions – SUD is one such potential outcome of repeated childhood exposure to trauma.² These risk factors are like those found in other mental health disorders, and SUD can, and often is, complicated by additional co-occurring mental health disorders. A person may use a substance to cope with a preexisting mental health condition, which could then lead to the development of SUD. Additionally, a person can develop other mental health disorders because of the use of substances.³

When a person with SUD or opioid use disorder (OUD) becomes pregnant, the complexity and vulnerability for that patient increases. In 2020, for every 1,000 labor & delivery hospitalizations, 29.7 of those were patients with OUD. In 2021, 7% of infants born in Maine were substance exposed, putting the state at the third highest rate of substance exposed infants in the nation, behind Vermont and West Virginia.⁴ Amidst the nationwide opioid crisis, data revealed a concerning increase in OUD amongst women of reproductive age, indicating a need for universal screening for SUDs in obstetric settings.⁵ In response, organizations such as the American College of Obstetricians and Gynecologists issued recommendations that included early universal screening, brief intervention and referral to treatment.⁶ Recent research has also shown a concerning increase in substance-related maternal mortality. This research points to a need for improved SUD treatment in health systems, coordinated care and increased support in the community. Best practices for supporting patients with SUD endorse this approach as well.⁷

Most pregnancies in patients with OUD are unplanned. The unexpected news can often be a source of motivation to engage in recovery services and treatment. However, it can also be a time of uncertainty and fear. Disclosing substance use during pregnancy is often difficult due to concerns around stigma and potential child welfare implications. It is important to remind patients that a variety of potential treatment options exist, and pregnant patients typically have priority access to many facilities. Engaging in shared decision making is often the most effective means of moving patients along the recovery continuum.

Education using person-first, non-stigmatizing language should be offered at every visit so the individual can make the best decision for them and their recovery journey. If the patient is not ready to enter recovery, SUD treatment options should be offered at every visit moving forward to continue the conversation and remind the patient that the door is always open. Consideration of other individuals in the home who may have an active SUD is also important and providers should be familiar with treatment options for partners or other members of the family.

Principles of Trauma Informed Care

Utilizing a trauma-informed approach develops trust with the patient and mitigates the risk of re-traumatization.

As outlined by the MaineHealth ACEs and Resiliency Program, trauma-informed care refers to a system of care in which the environment, both physical and human, is supportive, fosters patient comfort and trust, promotes the health and effectiveness of staff, and improves staff knowledge of trauma and its impact on how patients engage with the care system. Frequently, SUD has roots in adverse childhood experiences (ACEs) and living with a SUD can be traumatizing as well. Utilizing a trauma-informed approach develops trust with the patient and mitigates the risk of re-traumatization. Working through a trauma-informed lens is something of a treatment modality in itself; consistent application of those principles in your practice will help to build resiliency for your patient. From a trauma-informed lens, it is critical to create a therapeutic environment consistent with mutuality and honesty and to ensure that the space in which you are meeting with a patient is one in which they feel safe and secure.

Women with OUD report high rates of intimate partner violence (IPV) and it is critical to screen for IPV in private. IPV can impact a patient's recovery journey in many ways; women report that their partner's substance use often contributed to physical violence, that emotional and verbal abuse often prevented them from fully engaging in their recovery while financial abuse prevented them from gaining independence from abusive partners.⁸ Women often cope with IPV experiences by using substances and evidence supports the adverse impacts of IPV on SUD treatment-related outcomes.⁹ It is essential to integrate IPV screening and referrals into SUD treatment. Knowledge of local resources is important so that immediate referrals/warm hand-offs can be made.

The concern of stigma and bias is especially relevant in individuals with SUDs. Though there is growing understanding and acceptance of the reality of SUD as a chronic disease, strong biases against people who use substances are pervasive across society, including within the medical field. Alongside trauma informed care principles, staff should be educated on and aware of how stigma and bias contribute to inaccurate understandings of patients and can perpetuate harm to patients. Among many other outcomes, patients may avoid accessing care out of fear and concern about stigma.

Who's On The Team?

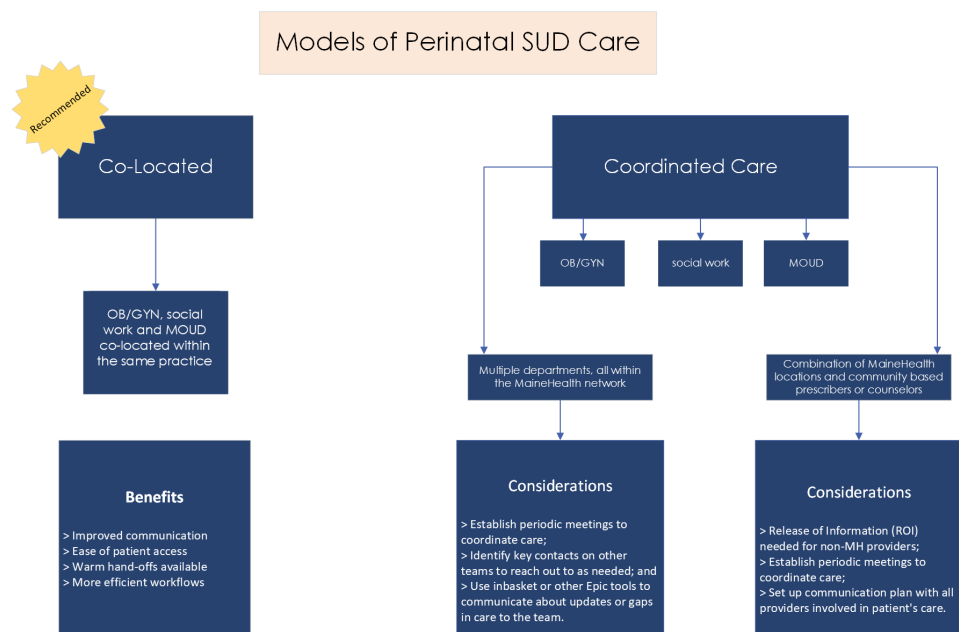
Supporting pregnant people with SUD truly is a team effort and requires input from a variety of perspectives and specialties. Comprehensive care should be inclusive of both clinical aspects and the consideration of a more holistic picture of the patient, their families and their lives. This team may include colleagues who work at the same practice, or it may extend to care team members from other facilities and practices both within and out of the MaineHealth network.

For comprehensive treatment of perinatal SUD, the roles supporting patients with SUD may include:

- Obstetrician/Certified Nurse Midwife or other Women's Health providers
- Addiction medicine specialist/MOUD prescriber
- Nurse care coordinator
- Medical assistants and clinical staff
- Social worker/behavioral health services
- Peer Recovery coaches
- Community health workers

Especially in practices that must be creative within their own staffing resources, streamlined support for patients with SUD can be developed through intentional workflows. For example, when it comes to coordinating resources and additional support for patients, some practices may have a social worker or a nurse care coordinator that can take that role on, while others may utilize a community health worker.

Similarly, another helpful approach to streamlining support for patients with SUD is for staff to crosstrain on different roles and tasks within the workflow. With complicated situations and potentially lean staffing options, it can be easy for things to fall in the cracks. Patients living with SUD are often especially vulnerable to falling by the wayside, highlighting the importance of clear and intentional plans around these processes.



An Important Note on Gender and Language

In this toolkit, we have used gender neutral terminology when referring to pregnant patients. We acknowledge that gender is expansive and that people other than women can also be pregnant, as well as that people across gender identities are parents. We encourage providers to be conscientious and mindful of their individual patients' identities, whether transgender, nonbinary or cisgender, and to use the appropriate language as applies to their patients.

Perinatal SUD Toolkit

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Workflows and Clinical Guidelines

Talking with Patients

Though sensitive and difficult conversations are a regular part of working in healthcare, working with patients with SUD requires thoughtful and tactful communication to build trustful relationships as well as being an aspect of providing comprehensive care. Thoughtful and trauma informed communication strategies help to build resilience as well.

Here are some helpful tips for framing your conversations and language when approaching communication with a trauma-informed philosophy courtesy of the ACEs Toolkit.

Key components of a trauma-informed approach include:

- Asking permission to discuss questions or other difficult subjects.
- Explaining and providing psychoeducation, but not giving advice.
- Listening and communicating in a non-judgmental manner.
- Acknowledging feelings, providing validation, and showing support.
- Encourage by asking follow up questions that begin with the word “what.”
- What happened?
- What did you do then?
- What will things be like today when you go home?
- Collaborating on a plan with the goal of empowering patients to make positive change – and when positive changes occur, taking a moment to celebrate them, no matter how seemingly small or insignificant.

Social Drivers of Health (SDOH) Screening and Making Referrals

The social drivers (or determinants) of health (also abbreviated as SDOH) can be a significant aspect to the general health and well-being of all patients, though for vulnerable patients living with SUD, these factors are often even more critical. For example, the relationship between homelessness and substance use disorder is complex, with studies suggesting that substance use can be both a cause and consequence of homelessness. Housing and other social determinants are elements of a patient’s life that, while not necessarily clinical, contribute greatly to their overall health status and outcomes.

Some providers have shared that a working knowledge of local resources available in your community is still necessary to meeting SDOH needs, in addition to helpful tools like FindHelp. Sometimes resources are nuanced, and meeting your patient’s needs will require a deeper understanding of both the patient and what the resources offer. Occasionally a program may seem like a fantastic fit on paper but may have requirements or specifications that would render your patient ineligible.

The setbacks, barriers and shame that can arise from being unable to access community resources can add to a patient’s distress and disconnection. A thorough and intentional understanding of both the local community resources and your patient’s situation is integral to good care. However, we acknowledge that resources change quickly, and disappointing outcomes can still arise despite the best preparation. An aspect of the care team’s role is also to support managing difficulties and connecting

with the patient if resources become challenging. Additionally, it is important to recognize that it may be more difficult than anticipated for patients to access needed resources, and often these issues are systemic.

MOUD Treatment

If screenings are positive for SUD/OD, the next step is to explore where a patient is in their recovery journey. Do they already have a medications for opioid use disorder (MOUD) plan, or are they ready to begin one? If the patient is already in MOUD treatment with another provider, be sure to get a release of information (ROI) with that provider and be in regular communication about treatment plans.

Although patients may express a desire to stop opioid use entirely upon discovering their pregnancy, this is not recommended.

MOUD is the standard of care for patients with OUD, and all FDA approved medications should be available to all patients. Patients should be evaluated comprehensively and assessed for risks, preferences, and experiences, but MOUD should not be denied based on things like use of other substances (cannabis, benzodiazepines, stimulants, alcohol, etc.).¹² Although patients may express a desire to stop opioid use entirely upon discovering their pregnancy, this is not recommended. The safest option is to initiate MOUD to avoid withdrawal and reduce cravings while increasing the likelihood of accessing prenatal care and achieving a healthy, full-term pregnancy. Additionally, quitting “cold turkey” without medical support can increase the likelihood of a return to use, and heightens the risk of drug overdose.

Buprenorphine, a partial agonist of the mu opioid-receptor, can be safely used during pregnancy. Both sublingual formulations – monotherapy or the combination product with naloxone – can be prescribed.¹³ Section 1262 of the Consolidated Appropriations Act, 2023 removed the federal requirement for practitioners to submit a Notice of Intent, or have an x waiver, to prescribe buprenorphine. Any prescriber with a current DEA registration that includes Schedule III authority can prescribe buprenorphine in either the inpatient or outpatient setting.¹⁴ There are limited data around the use of the long-acting injectable form of buprenorphine during pregnancy, but it may be appropriate in certain clinical situations.

Any prescriber with a current DEA registration that includes Schedule III authority can prescribe buprenorphine in either the inpatient or outpatient setting.

Methadone, a full agonist of the mu opioid receptor, can also be used to treat OUD in pregnancy. In the outpatient setting, methadone for the treatment of OUD can only be dispensed by federally licensed outpatient treatment programs (OTP). Initially, patients are required to present at the clinic daily for dosing. “Take homes” (i.e., doses dispensed by the OTP and self-administered at home) are often available after certain parameters have been met. While methadone clinics are readily available in more urban parts of the state, patients may need to travel hours to the closest clinic in other parts of the state. Transportation is often one of the most significant barriers to obtaining treatment at an

OTP and it is vital for care coordinators to ensure the patient has rides to the clinic. They can assist in arranging transportation through MaineCare covered service providers as trips to the OTP are considered medical appointments.

While prescribing buprenorphine no longer requires an x waiver, Maine's Chapter 488 requires prescribers (or their delegates) to check the prescription drug monitoring program (PDMP) for each patient upon the initial prescription of an opioid medication and every 90 days thereafter for as long as that prescription is renewed.¹⁵ Maine's PDMP is linked in Epic and the system requires you to select "marked as reviewed" every 90 days.

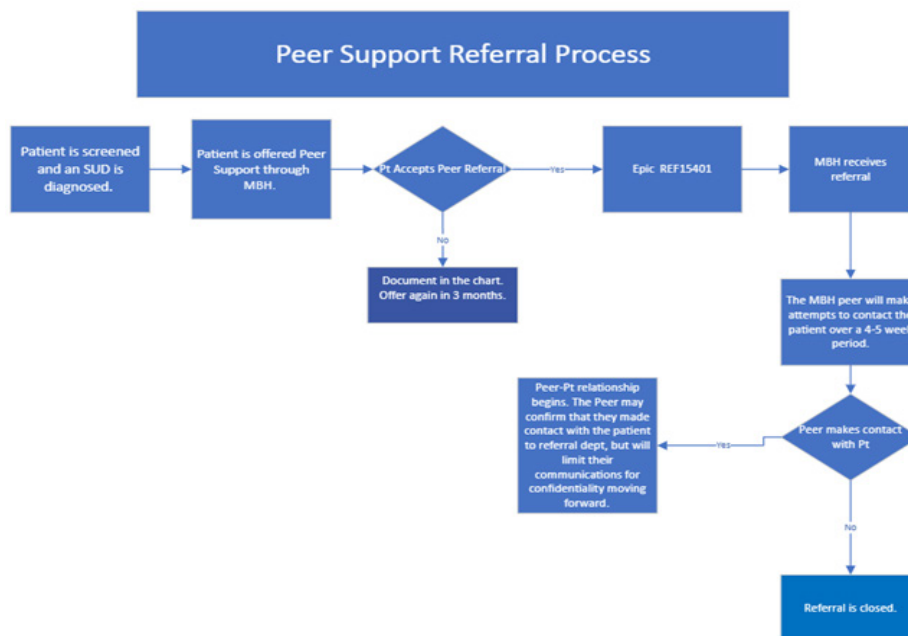
An example of a PDMP report is provided below. For the 4/30/24 prescription, it was sent to the pharmacy ("written") and picked up by the patient ("filled") on the same date. For the 5/14/24 prescription, it was sent to the pharmacy on 5/14 but not filled by the patient until 5/21 noting a likely "gap" in medication coverage. The PDMP also provides the name, quantity, and number of days of medication dispensed. In this case, the patient is prescribed Suboxone 8/2 mg film, and she is prescribed 1 film daily as the quantity and number of days are the same. The PDMP also provides the prescriber's initials. Note that, in most circumstances, extended-release buprenorphine will not appear in the PDMP as it is most often billed through the patient's medical rather than pharmacy benefit. Only medication that is sent to a pharmacy is recorded in the PDMP.

Filled ▾	Written ⚡	Sold ⚡	ID ⚡	Drug ⚡	QTY ⚡	Days ⚡	Prescriber ⚡
05/21/2024	05/14/2024		7	Suboxone 8 Mg-2 Mg Sl Film	14.00	14	Al O'c
04/30/2024	04/30/2024		10	Suboxone 8 Mg-2 Mg Sl Film	14.00	14	Al O'c

Peer Recovery

Peer support services are an important offering for people in recovery. They provide a supportive relationship for patients, connecting them with an individual with lived experience who is trained to support others on their journey. Maine Behavioral Healthcare's program includes Peer Coaches who specialize in perinatal care.

Working with a peer recovery coach is optional for patients, and a patient's desire to not engage with peer recovery services should not be considered a lack of commitment to or interest in recovery. While peer recovery services can be a part of a patient's treatment plan, peer recovery functions differently than other clinical interventions you may be used to. Peer coaches use minimal documentation, for example, and will be limited in their communication with other providers about the person in recovery shared by both clinical staff and peer recovery coaches. Please note that this is by design, and it is normal that peer recovery services have different workflows and boundaries around communicating with other care team members around patient care.

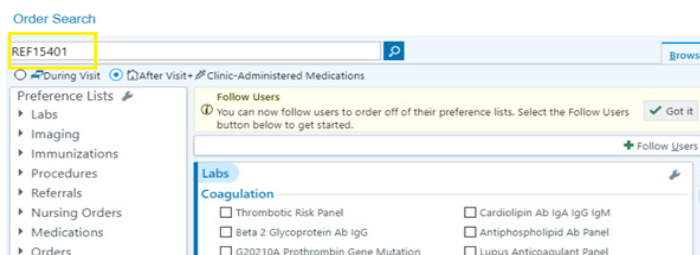


Making a Peer Referral in Epic

1. In Encounters, navigate to the bottom of the screen and select 'add order'



2. In the search bar, type 'REF15401'. This is the referral code for Peer Recovery services.



3. Select AMB Referral to Peer Services

Order Search

REF15401

Panels (No results found)

After Visit Medications (No results found)

After Visit Procedures

Px Code	Name
REF15401	AMB Referral to Peer Services

During Visit Medications (No results found)

During Visit Procedures

Name	Type	Pref List	Px Code
AMB Referral to Peer Services	Outpa...	MH IP W...	REF15401

4. The referral will open for you to include comments. If your patient is pregnant or postpartum and has an OUD, they may be a good candidate for the MaineMOM program, and there is a Peer Recovery program specifically for MaineMOM patients.

AMB Referral to Peer Services

Emergency (within 24 hrs)

Class: External Referral Internal Referral

Provider Specialty: Behavioral Health Behavioral Health

Ref to Department:

Referral:

To Location/POS:

By Provider:

To Provider:

Number of Visits: 3

Comments:

Referral for stand-alone Peer Support Services from ED, Inpatient, or Outpatient service providers. All referrals require patient permission.

This patient is being referred for:

Peer services

☐ Emergency Dept. Peer Recovery Coach: Substance use recovery support for current or last 6 month ED visit, 18+

☐ MaineMOM Peer Support: Pregnant or Postpartum with substance use concerns, 18+

☐ Youth Peer Support: Mental health and/or substance use, 14-25 yrs old

The Comments field contains unfilled variables ("") or SmartLists.

Next Required

Accept Cancel

Providers can access a useful patient-facing document on peer recovery services through the Forms and Patient Education Portal using the ID code 148157.

Harm Reduction in Pregnant and Parenting People

Harm reduction is a framework built upon respect for people who use substances and ensures that parenting people with substance use disorders are treated with kindness and respect. Harm reduction is an approach that helps to reduce the negative effects of substance use while helping parenting people meet their immediate health, social and safety needs. It is not focused on whether people should or should not use substances, but simply acknowledges that they do. The concept of harm reduction is widely supported in many other settings (e.g., seatbelts, bike helmets, sunscreen) but is often associated with misunderstandings in the context of SUD. Some may think that it is enabling or encouraging ongoing substance use or that it “keeps people addicted,” when it is evidence based best practice.¹⁶ Harm reduction practices allow for a trusting relationship between provider and patient, as well as helps the care team to have a more accurate understanding of a patient’s use of substances.

Engagement in harm reduction services in the peripartum population has been shown to improve health outcomes. It increases patient engagement and retention in prenatal care and improves health outcomes for infants including fewer preterm and low birthweight infants and increases the likelihood that infants are discharged home with their mother.¹⁷

There are several harm reduction strategies that have been successfully utilized in pregnant and parenting people.

- **Connection with a Peer:** Peer-based services increase engagement of people with SUD or that use substances regularly. Harm reduction services led by peers can identify specific populations at increased risk of overdose and other substance use related harm and partner with these individuals to provide harm reduction strategies, education, and prevention while offering recovery services when applicable.¹⁸

- **Reducing the risk of drug overdose by:**

Providing Naloxone to all individuals, including those that are pregnant.

Encouraging people not to use alone. Individuals who use substances alone are at greatest risk of drug overdose, especially those living in rural areas.¹⁹ Websites such as Never Use Alone enable individuals who use substances to obtain peer support. These peers will remain on the phone while the individual ingests the substance and will activate emergency services in the event a caller becomes non-responsive.

Encouraging the use of fentanyl test strips. Fentanyl test strips have been shown to reduce the risk of drug overdose by reducing risky behavior including using a smaller amount of the substance, slowing down substance use and not using alone.²⁰ Fentanyl test strips can be particularly useful when individuals are trying to determine whether stimulants also contain illicit opioids. Fentanyl test strips obtained at many Maine SSPs.

- **Reducing transmission of infectious disease**

Syringe Services Programs (SSPs) are community-based programs that provide access to sterile needles and syringes, facilitate safe disposal of used syringes, and provide linkages to other important services and programs such as SUD treatment, screening for infectious diseases (e.g., hepatitis, HIV, sexually transmitted diseases), naloxone education and distribution as well as abscess and wound care. The Maine CDC oversees all SSPs. A list of Maine SSPs is available at: <https://www.maine.gov/dhhs/mecdc/infectious-disease/hiv-std/services/syringe-service-programs.shtml>

- **Good Samaritan Laws.**

One of the most common reasons individuals do not call 911 during a drug overdose is fear of criminal justice involvement. Maine's Good Samaritan Law prevents a person from being arrested or prosecuted for certain violations if the grounds for that arrest or prosecution result from the person experiencing a drug-related overdose or seeking medical assistance for someone else who is.²² It protects individuals who, in good faith, seek medical assistance for a person experiencing a drug-related overdose and/or a person who is experiencing an overdose and needs medical assistance.

Close attention to the social determinants of health can also reduce the risk of substance use related harm. Access to safe housing, adequate nutrition, intimate partner violence resources as well as treatment for any co-occurring mental health diagnoses mitigate harm from ongoing substance use. Additional information about harm reduction and strategies to reduce drug overdose as well as ways to obtain naloxone and fentanyl test strips can be found through Maine's OPTIONS program.²³

Toxicology Screening

Toxicology screening is often a source of confusion. Patient consent is required, and results should be used to guide clinical decision making, not in a punitive approach. It is critical that providers understand what substances are included in specific toxicology screening as, in most cases, standard "opiate" screening will not capture synthetic opioids like the non-pharmaceutical fentanyl which is responsible for most opioid overdoses in Maine and beyond.²⁴ Toxicology screening also detects only those substances that are above a predetermined threshold or "cut off" and the duration of time substances remain in the system varies.

Toxicology screening is most often a two-step process – an immunoassay screening followed by confirmatory testing as needed. Immunoassay screening is qualitative (i.e., positive, or negative) and is a chemical reaction that detects the presence or absence of a substance. Immunoassay results are not considered definitive, and specimens should be sent for confirmation as needed. Confirmatory testing is typically quantitative (e.g., 254 ng/dl of fentanyl) and is the result of either gas or liquid chromatography and mass spectrometry (i.e., GC/MS or LC/MS) testing.

Talking with patients about the results of toxicology screening: This can be difficult especially if providers lack confidence in their knowledge around ordering screenings and interpreting results. It is best to talk with patients openly and honestly about results while treating them with dignity and respect. Terminology is especially important when discussing results – specimens should not be considered “dirty” or “clean” but rather positive or negative or appropriate or inappropriate. There are a patients may not be forthcoming about their substance use and it is okay to say that the results are inconsistent with a patient’s reported history, but it is critical to not be confrontational.

Resources: There are a variety of excellent resources for better understanding toxicology screening and providers are encouraged to refer to these resources.²⁵ If you need assistance interpreting toxicology testing results, consider an Epic chat to the MaineHealth MaineMOM clinical advisor (Alane O’Connor). If interpretation assistance is needed urgently, consider calling the Maine Poison Control Center at 1-800-222-1222 as they are available 24/7.

Hepatitis C Virus

Universal screening for the Hepatitis C virus (HCV) is recommended during each pregnancy.²⁶ HCV screening is particularly important in women with OUD as the rate is more than 50% higher than for the general population of pregnant women.²⁷ Among deliveries of women with OUD in the US, the rate of maternal HCV infection increased from 87.4 to 216.9 (95% CI = 197.9–235.9) per 1,000 deliveries from 2000-2015.²⁸ MaineMOM developed an algorithm for screening and treating HCV in pregnant and postpartum women with SUD.²⁹ The tool discusses the difference between HCV antibody and antigen testing and the implications of each as well as the frequency of testing based on ongoing risk factors.

Many advances have been made in HCV treatment over the past decade, *but it is still not recommended to treat the virus during pregnancy or while breastfeeding.* However, treating postpartum women for HCV reduces the risk of future maternal complications and prevents potential vertical transmission (i.e., where the virus passes from mother to infant in utero) to future children. Providing this care in postpartum care settings (including obstetric practices as well as family medicine/primary care) and substance use treatment programs increases the likelihood of HCV treatment as women are often lost to follow up in the referral process to specialty clinics. While MaineCare requires a prior authorization for the medications used to treat HCV, the actual treatment is a relatively simple process, and providers are encouraged to include this in their clinical practice.

The rate of HCV vertical transmission is approximately 7.2%.³⁰ If caring for both the mother and infant, it is helpful to put exposure to HCV in the infant’s problem list to ensure appropriate follow up. Postpartum women with HCV should be reminded that their infants should be screened in the first 18-months of life. HCV treatment can be initiated in infants as young as three years of age.

Anticipatory Guidance about Neonatal Opioid Withdrawal Syndrome

Patient education and anticipatory guidance are especially important for pregnant women with OUD. They should be counseled that, like other opioids, methadone and buprenorphine can cause a withdrawal syndrome in the infant after birth. Neonatal opioid withdrawal syndrome (NOWS) can consist of central nervous system hyperactivity, autonomic nervous system dysfunction, and gastrointestinal problems, with symptoms typically beginning within 24–72 hours after birth.³¹

Infants with NOWS are monitored with the Eat, Sleep Console Protocol which has proven superior to the Finnegan scoring system used previously by reducing the duration of infant hospital stay and need for medication among opioid-exposed infants.³² Patients should be counseled that infants at risk for NOWS will be monitored in the inpatient setting for 5-7 days, potentially longer if treatment is required. Providers can educate patients about the non-pharmacologic treatment for NOWS including a peaceful atmosphere (e.g., low-light, and quiet rooms) and calming techniques such as swaddling and skin-to-skin contact.

Pain Management for Pregnant Women with SUD

Being familiar with the principles of pain management when caring for pregnant patients with SUD is essential. The general concepts in pain management are well covered in the related Maine Opioid Response Clinical Advisory Committee position statement.³³ The document also includes provider communication tools as well as patient education materials. Continuing MOUD during the perioperative period is critical but does not provide adequate pain relief. Additional opioid and non-opioid medications can be used safely and should be titrated until adequate analgesia is achieved. Providers should prescribe opioid medications at discharge for patients with OUD if it is clinically appropriate.

Providers should be aware that patients with SUD have often had adverse experiences with the healthcare system, especially around pain management, and may minimize or be reluctant to disclose their pain. They have often felt that providers did not listen to or believe them, and they have been discredited by having derogatory statements made about individuals with SUD. Ideally, providers are aware of both their verbal and nonverbal communication with patients and pay special attention to non-stigmatizing language to build rapport with patients with SUD.³⁴

In pregnant patients with SUD epidural or spinal anesthesia is often ideal for the management of pain during labor and delivery but providers should be aware that they often contain fentanyl. The neuraxial fentanyl used in labor analgesia may lead to positive maternal and/or neonatal toxicology tests and caution should be used in interpreting toxicology test results of individuals who received neuraxial analgesia to ensure that providers do not inaccurately conclude that illicit substance use has occurred.³⁵

This can be distressing for patients and communication and shared decision making is essential. Obtaining a urine specimen when the individual arrives for delivery and prior to the epidural or any analgesia is administered can be the best way to determine whether illicit substance use occurred immediately prior to the delivery hospitalization. Opioid agonist-antagonist drugs such as butorphanol, nalbuphine, and pentazocine that are sometimes utilized during delivery should be avoided because they can precipitate acute withdrawal in patients taking an opioid agonist.³⁶

Buprenorphine Initiations in Pregnant Patients in Emergency Department

Pregnant patients should not be denied immediate access to life saving treatment of their opioid use disorder (OUD) in the emergency department (ED) because of their pregnancy. A study in California revealed that approximately 6% of patients of child-bearing age who presented to the ED for buprenorphine initiation were pregnant. Relative to non-pregnant patients with OUD, pregnant patients seeking OUD treatment in the ED had similar characteristics, acceptance of treatment, dosing, treatment outcomes, and follow up rates as non-pregnant patients.³⁷

This suggests that EDs can serve an important role in initiating buprenorphine during pregnancy. The primary concern around offering OUD treatment to pregnant patients in the ED is the risk of withdrawal which is believed to be potentially harmful to the fetus. While efforts should be made to minimize opioid withdrawal, more recent literature suggests that it may not be associated with fetal harm.³⁸ In addition, ongoing illicit opioid use and the related risk of complications including overdose death far exceed any risk of withdrawal related harm to the pregnant patient or fetus.

Like non-pregnant patients, pregnant patients should be offered treatment with buprenorphine in the ED if adequate opioid withdrawal exists or provided medication for an “at home” initiation if adequate opioid withdrawal is not present.³⁹ At home initiation of buprenorphine during pregnancy appears to be as effective as observed initiation in terms of successful initiation and treatment follow up.⁴⁰

While best practices in buprenorphine initiation in the fentanyl era are constantly evolving, small studies suggest that both low-dose and high-dose initiation may be considered in pregnancy.^{41,42} Fetal monitoring is not required to start buprenorphine in a normal pregnancy, regardless of gestational age, and admission for observation is not required for buprenorphine initiation.⁴³ Either buprenorphine monoproduct or the combination product with naloxone can be used safely. At discharge, the patient should be dispensed naloxone and provided a follow up plan including appointment time/location, ideally in the form of a “warm handoff.” A MaineMOM program that offers both perinatal care and OUD treatment might be an ideal setting.⁴⁴

Consultation with an obstetric provider should not delay access to OUD treatment in the ED. Patients should be encouraged to consider inpatient admission in the context of severe opioid withdrawal, being mid-late third trimester of pregnancy and/or at high-risk for premature labor, having poor cardiovascular capacity, or experiencing pregnancy or substance use related complications that would be best managed inpatient (e.g., pre-eclampsia, bacteremia, endocarditis, abscess) but providers should engage in education and shared decision making and not deny access to life-saving medication if the patient declines hospital admission.

Maine's Substance Exposed Infant Notification and the Plan of Safe Care

Maine has a statute requiring health care providers to create and submit a Plan of Safe care to the Office of Child and Family Services when:

- infants are affected by substance use;
- have withdrawal symptoms that require medical monitoring or care beyond standard newborn care;
 - Specifically, when symptoms may have resulted from prenatal drug exposure (whether legal or illegal); or
- have fetal alcohol syndrome⁴⁶

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Maine's Plan of Safe Care is designed to improve the safety and well-being of infants impacted by prenatal substance exposure and promote positive recovery outcomes for their caregivers. It meets the requirements of the federal Child Abuse Prevention and Treatment Act. All infants born substance exposed must have a Plan of Safe Care. Maine's Plan of Safe Care is created between a healthcare or social services provider, mother and/or other caregivers through respectful, collaborative, strengths-based conversations.

Communication with Patients: Patients are often confused and fearful of the notification process and it is helpful to explain how it will occur at delivery. Reassure your patients that being in SUD treatment is the safest and best choice for the maternal-fetal dyad.

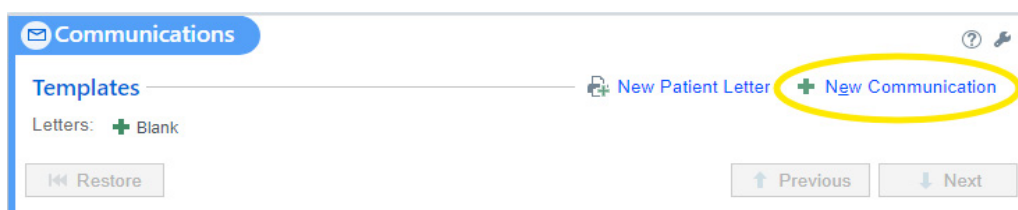
The goal of the Plan of Safe Care is to identify family strengths and needs, as well as beneficial resources and actions to best support substance exposed infants and families. The Plan of Safe Care can often be used as a source of motivation as it documents the many steps a patient may have taken to improve the well-being of herself and her pregnancy. It documents ongoing referrals to services and provides contact information to families for their own follow-up. It can be completed and faxed to Maine's Office of Child and Family Services, or it can be completed through the online portal.⁴⁷

CradleME Referrals

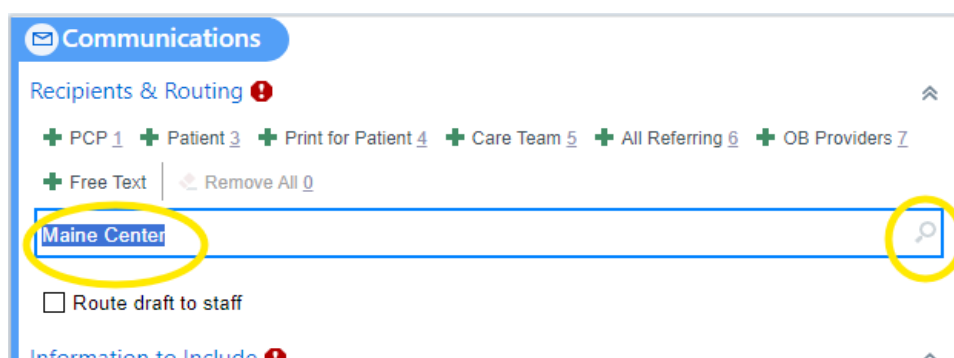
The state of Maine offers a helpful resource for families to get connected to supportive programs and organizations as they transition into life with their new infant. CradleME is for all new parents and caregivers, and is a free service. Providers complete a CradleME request that indicates the services and supports the patient and family is interested in receiving. These programs include Public Health Nursing, WIC Nutrition Program, Early Intervention for ME and MaineMOM. Once submitted, representatives from the individual programs will reach out to the patient/family to support them further.

Here at MaineHealth, the CradleME form has been integrated into Epic, making completing this form as part of your workflow very simple:

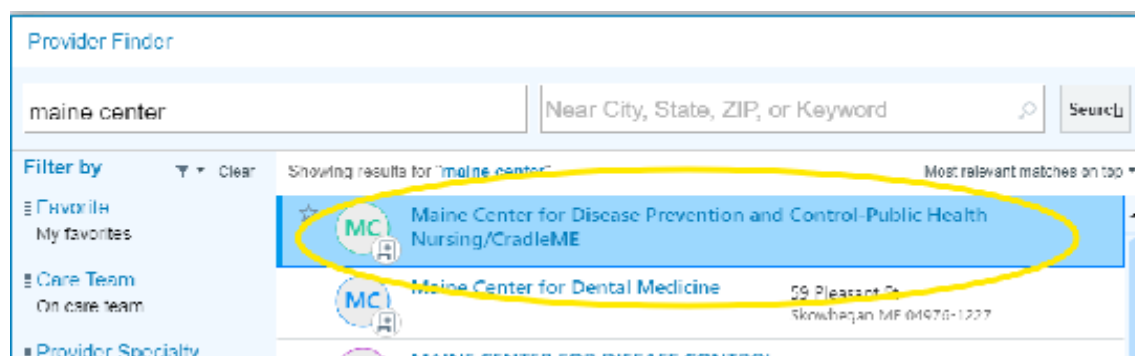
1. With the patient's chart open, navigate to the Communications activity and choose New Communication.



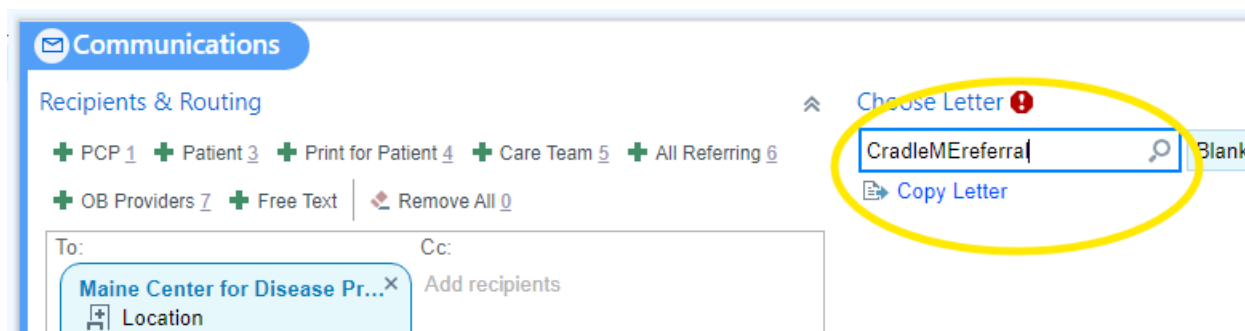
2. In the Recipients & Routing section, enter 1- Maine Center and 2- click in Search field.





3. In Provider Finder popup window, select Maine Center for Disease Prevention and Control-Public Health Nursing/CradleME selection.



4. In the Choose Letter section, search CradleMEreferral and select.



5. When the letter populates, enter appropriate referral information.

 CradleME is a Connection to Supporting Services and Resources Available to all Pregnant and/or Parenting Individuals and Families in Maine	
First and Last Name: Christina Prenatal-OB/GYN /Abdenn	
Date of Birth: 10/6/2004	Estimated Due Date: Estimated Date of Delivery: 2/1/25 Anticipated Discharge Date:
Relationship to Child: <input type="checkbox"/> Mom <input type="checkbox"/> Dad <input type="checkbox"/> Kin Placement <input type="checkbox"/> Grandparent / Foster / Resource Parent	
Interpreter Needed? <input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes, language needed:
Phone Number: 608-732-6043	Other Phone or e-mail: dcmull@fsgm.com (If for text?) <input type="checkbox"/> Yes <input type="checkbox"/> No
Mailing Address: 5633 Main St Fitchburg ME 53711	Home Address:
Parents' Health Care or Prenatal Provider Name:	Phone:
Child(ren) First Last Name:	Date of Birth: <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Other <input type="checkbox"/> First Baby?
Child(ren) First Last Name:	Date of Birth: <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Other <input type="checkbox"/> First Baby?
Child(ren) Health Care Provider Name:	Phone:
Child's Anticipated Discharge Date:	
CradleME services and supports If you want to receive a call or text to learn more about the services listed below, check any or all boxes:	
<input type="checkbox"/>	Public Health Nursing: Provides in-person or virtual education, emotional and socializing support during your pregnancy and after birth to ensure the health of the family and infant, as well as provide coordination of care with community resources, and referrals. Our nurses are Certified Lactation Counselors.
<input type="checkbox"/>	WIC Nutrition Programs: A supplemental nutrition program for Women, Infants, and Children offering complete nutrition care, including healthy food benefits, breastfeeding support, and referrals.
<input type="checkbox"/>	Early Intervention for ME: A statewide system of early intervention services for infants and toddlers (birth through age 3) with developmental delays or diagnosed conditions that may lead to future developmental delays, and
<input type="checkbox"/> Delivery Use <input type="checkbox"/> Non-pregnant/Contraception use <input type="checkbox"/> Alcohol use disorder <input type="checkbox"/> Other health-related risk factors affecting pregnancy. Please specify:	(If you are currently pregnant, please specify.) (If you are currently pregnant, please specify.) (If you are currently pregnant, please specify.)
REFERRING ORGANIZATION- PLEASE COMPLETE	
Organization: ***	Name: Abdenn, Francis-OB/GYN, MD Phone: ***
	

6. Choose appropriate actions such as Send Now, Send at Sign Visit, Print, etc.

Staff Support

Working in healthcare is a challenging field, wherein we witness a spectrum of human experience – from great outcomes to heartbreaking ones. Supporting a patient with SUD can have unique challenges, given the nature of the disease’s features and the chaos that can be wrought for the patient as well as their family. Secondary trauma and burnout have real impacts on care team members, and those effects can impact patient care as well.

Having opportunities to “defuse” those feelings and process challenging experiences is imperative for the ongoing health and wellbeing of a provider both professionally and personally. It is strongly encouraged and recommended that the practice intentionally structures these opportunities for staff, though this could look different at various sites. Some care team members have shared that their interpersonal relationships with colleagues allow them an opportunity to work through hard moments, which is a testament to the strength of a good team. However, formalizing those structures validates their importance and ensures it’s an accessible structure for all staff.

The practice’s integrated behavioral health clinician is a great resource for this support need, but occasionally that person is also involved in these complex situations and could also benefit from additional support.

If a team needs a supported debriefing/defusing session, the MaineHealth behavioral health innovations team can assist. Reach out to CIRTEAM@mainehealth.org and a team member will be in touch to plan.

Guidance for Supporting Patients with Other SUDs

Alcohol use and alcohol use disorder

Alcohol use in pregnancy continues to be a major public health concern. Despite being clearly established as a teratogen, a recent study found that 13.5% of pregnant patients in the United States reported current drinking, and 5.2% reported binge drinking in the past 30 days.⁴⁸ The diagnosis of an alcohol use disorder (AUD) during pregnancy is associated with an increased risk of adverse birth complications including placenta previa and intrauterine growth restriction.⁴⁹ A recent review also found that alcohol consumption during pregnancy was associated with a dose-mediated increase in miscarriage risk.⁵⁰ Fetal alcohol spectrum disorders (FASD) are a wide range of physical, behavioral, and cognitive impairments that occur due to alcohol exposure before birth. Prenatal alcohol exposure of any severity is associated with greater psychopathology, attention deficits, and impulsiveness, with some effects showing a dose-dependent response.⁵¹ These impairments may appear at any time during childhood and last a lifetime.⁵²

Treatment of alcohol use disorder

Despite the clear harm associated with AUD during pregnancy, the use of medication to treat this population remains rare. A recent review found that the risks associated with the use of naltrexone and acamprosate during pregnancy are likely less than the risk associated with alcohol exposure.⁵³ A growing body of evidence on the use of naltrexone in pregnant patients with OUD supports the safety and potential efficacy of its use in the treatment of AUD.⁵⁴ Only disulfiram, a copper chelating agent, is associated with known fetal harm as copper deficiency in pregnancy has been associated with congenital anomalies, impaired cognitive and behavioral function and perinatal mortality.⁵⁵ Many behavioral health interventions for the treatment of AUD have been validated for use in pregnancy including motivational enhancement therapy, brief interventions, and cognitive behavioral therapies.⁵⁶ As alcohol use is both ubiquitous and often normalized in society, it can be particularly hard for pregnant women to avoid the substance. Working with a peer recovery specialist can help sustain positive behavioral changes and can provide support around the stigmatization of pregnant women with AUD.

Cannabis use and cannabis use disorder

Patients often experience confusion about whether cannabis can be safely used in pregnancy, especially as medical marijuana cards can be common. In addition, providers tend to give inconsistent messaging around its use in pregnancy. In the literature, maternal and fetal outcomes following cannabis exposure during pregnancy do not reflect the increasing potency of cannabis in both the medical and recreational market. There is no known safe level of cannabis use during pregnancy or lactation and pregnant women should be counseled regarding the risks of in utero exposure.

A recent study of more than 20,000 women who used cannabis during pregnancy found that it was associated with a greater risk of gestational hypertension, preeclampsia, weight gain less than and greater than guidelines, and placental abruption after adjusting for potential confounders.⁵⁷ A second large study found that in utero cannabis exposure was associated with an increased likelihood of low birthweight, small for gestational age, preterm birth, and neonatal intensive care unit admission.⁵⁸

Prenatal marijuana exposure was significantly associated with developmental delay at 15 and 18 months of age; fine motor and social skills were more likely to be effected than gross motor or language delays.⁵⁹ Finally, among infants born to those with maternal cannabis use disorder (CUD), the incidence of infant death in the first year of life was greater than for those born to women without CUD.⁶⁰ Sudden unexpected infant death (SUID), which is disproportionately higher among infants born to women with SUD, was a common cause of death. Sleep environment hazards such as bed sharing and impaired parenting increase the risk of SUID⁶¹ and discussion around safe sleep with individuals who are using cannabis and other substances is imperative.

Treatment recommendations

Patients often have limited insight into how cannabis use might impact their parenting and are not always accepting of treatment. A variety of behavioral health treatment approaches such as motivational enhancement therapy and cognitive behavioral therapy appear to be effective in treating CUD and double the likelihood of cannabis abstinence at 3 to 4 months' follow-up.⁶² There are no FDA approved medications for the treatment of cannabis use disorder. However, gabapentin prescribed 1200 mg/day showed significant reductions in objective and subjective markers of cannabis use, withdrawal, and craving.⁶³ Using gabapentin in patients with other SUDs should be done cautiously due to its misuse and diversion potential.

Cannabinoid hyperemesis syndrome

It is critical for obstetric and SUD treatment providers to be aware of cannabinoid hyperemesis syndrome (CHS) as it can be confused with hyperemesis gravidarum or other severe nausea and vomiting during pregnancy which are not related to cannabis use. CHS causes acute onset of recurrent episodes of severe nausea, bouts of vomiting, and intense abdominal pain that last less than 1 week. The symptoms typically start abruptly within 24 hours of the last cannabis use.⁶⁴ One of the most significant clinical findings of CHS is that patients will often report temporary relief of symptoms when taking hot showers or baths. Patients with CHS will often present to the emergency department with dehydration and may require treatment with intravenous fluids and anti-nausea medications. Complete cessation of cannabis use is the most effective long-term treatment for CHS, however this often requires the support of a SUD treatment specialist.

Nicotine use and nicotine use disorder

Recent data indicate that, among US women with a recent live birth, 12.1% smoked before pregnancy, 5.4% smoked during pregnancy, and 7.2% smoked during the postpartum period.⁶⁵ Implications of maternal smoking during pregnancy are well established and include adverse effects on pre- and postnatal growth, an increased risk of fetal morbidity and mortality as well as harmful effects on the offspring's cognitive development and behavior.⁶⁶

Treatment of nicotine use disorders

A variety of psychosocial interventions including counseling have been shown to reduce both the frequency of women smoking later in pregnancy as well as the proportion of infants born low birth-weight.⁶⁷ When compared to women who continued to smoke during pregnancy, treatment with nicotine replacement therapy (NRT) was associated with a lower frequency of low birth weight, preterm birth, perinatal mortality, and neonatal intensive care admissions.⁶⁸ E-cigarettes also appear to reduce the frequency of maternal smoking and do not pose any additional risks to the maternal-infant dyad.⁶⁹ As NRT does not contain the many other harmful chemicals in tobacco products including carcinogens, the use of NRT is considered safer than continued smoking.⁷⁰ Individuals with SUD have an elevated prevalence of oral diseases, including dental caries, periodontal disease and xerostomia (dry mouth) which often complicates the use of nicotine gum and lozenges.⁷¹ Maine QuitLink is free of charge and offers phone coaching and online tools for quitting and can help move individuals from contemplation to action stage in smoking cessation.⁷²

Stimulant use and stimulant use disorder

This misuse of stimulants, usually cocaine or methamphetamine, is a growing concern among women of childbearing age. The most common complications of the use of illicit stimulants during pregnancy include maternal hypertension, vasoconstriction, decreased uterine blood flow, and placental abruption which can lead to severe bleeding and potential maternal and fetal death.⁷³ The consequences following in utero exposure to methamphetamine are generally more severe than cocaine due to the longer half-life and broader target sites within the central nervous system. Exposure to illicit stimulants during pregnancy does not appear to be associated with any fetal malformations or congenital anomalies. A meta-analysis of childhood outcomes following prenatal exposure to methamphetamine suggest that exposure is associated with poorer intellectual functioning, problem solving skills, short-term memory, and language development.⁷⁴

Treatment of stimulant use disorder

Like most use disorders, there are no specific studies of the treatment of stimulant use disorder in pregnant patients. There continues to be no FDA approved pharmacotherapy for the treatment of stimulant use disorder though a variety of medications have been used off-label with some evidence of success.⁷⁵ Psychosocial treatment of stimulant use disorder, most notably contingency management, which provides rewards for desired behaviors (i.e. negative stimulant drug tests) and withholds rewards for undesired behaviors (i.e. returns to use of stimulants) appears to be the most effective treatment of stimulant use disorder.⁷⁶ Due to the challenges treating stimulant use disorder, it is imperative to continue MOUD treatment for individuals with concurrent OUD if the patient is making progress toward some treatment goals, and if continuing to prescribe MOUD does not present a safety risk to the patient or community (due to diversion). Individuals with stimulant use disorders should also be prescribed naloxone even if they do not have a concurrent OUD due to the high risk of drug contamination.

Screenings

Using Screening Tools

Quick Start Guide

For all behavioral health screenings, create a screening environment that feels safe to the patient. This will help to build and reinforce rapport and trust with the patient.

Best practices include:

- Interview the patient in a private space.
- Interview the patient alone before bringing in their guest (partner, parent, friend).
- If an interpreter is needed, utilize practice-based services such as a CART or phone interpreter, instead of a family member.
- Always discuss the limits of confidentiality prior to doing an assessment, and report as necessary.

Initial OB Visit

The following screening tools are universally recommended for pregnant people. When a patient comes in for their first obstetrical appointment, they should be screened with these tools regardless of whether SUD is present or suspected: IPV, HCV, EPDS and 4Ps.

Intimate Partner Violence (IPV)

As previously mentioned, IPV is a traumatic experience that people with SUD are at risk of experiencing. People who experience intimate partner violence prior to and during pregnancy are at increased risk of low maternal weight gains, infections, and high blood pressure. They are also more likely to deliver pre-term or low birth weight babies. People who received prenatal counseling for IPV had fewer recurrent episodes of IPV during and post pregnancy, as well as better birth outcomes such as lower rates of preterm birth and low birth weight.

Additionally, there is significant overlap with IPV incidents and SUD.⁷⁷ Not only can substances exacerbate violence within a relationship, but a person with SUD is also vulnerable to relational power imbalances that put them at risk for IPV. Although screening for IPV is part of the standard set of SDOH screening tools, we want to highlight this specific screening because of its importance and the concerns for people with SUD.

1. The screening is accessible from either the toolbar:



or through the SDOH toolbar:



2. Ideally, your patient should be alone to answer these questions to ensure their safety and the freedom to answer openly. In any case, a patient may decline to answer.

Intimate Partner Violence (IPV)

Time taken: 1/3/2025 0938 + Add Group + Add Row + Add LDA Responsible Create Note Macro Manager

Intimate Partner Violence

Within the last year, have you been afraid of your partner or ex-partner?

Yes No Patient unable to answer Patient declined

Within the last year, have you been humiliated or emotionally abused in other ways by your partner or ex-partner?

Yes No Patient unable to answer Patient declined

Within the last year, have you been kicked, hit, slapped, or otherwise physically hurt by your partner or ex-partner?

Yes No Patient unable to answer Patient declined

Within the last year, have you been raped or forced to have any kind of sexual activity by your partner or ex-partner?

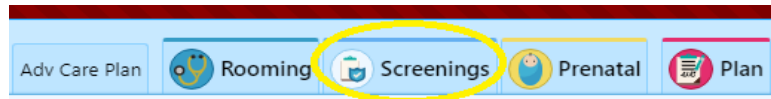
Yes No Patient unable to answer Patient declined

Create Note

3. If the screening indicates a positive result, the provider should discuss this with the patient and discuss a safety plan. The provider should also offer a referral to the local IPV support organizations.

Depression - Edinburgh Postnatal Depression Scale (EPDS)

1. In the patient's Epic chart, select the 'Screenings' tab from the top toolbar:



2. After opening the Screenings tab, you can scroll down to the screening, or select the title from the top to have it scroll directly to the screening for you.

A screenshot of the 'Edinburgh Postnatal Depression Screening (EPDS)' form in the Epic system. The form is titled 'Edinburgh Screening' and includes a 'Screening performed on' dropdown menu with 'Mother' and 'Father' options. Below this, there are several questions with corresponding radio button options. The questions are: 'I have been able to laugh and see the funny side of things', 'I have looked forward with enjoyment to things', 'I have blamed myself unnecessarily when things went wrong', 'I have been anxious or worried for no good reason', 'I have felt scared or panicky for no good reason', 'Things have been getting on top of me', 'I have been so unhappy that I have had difficulty sleeping', 'I have felt sad or miserable', and 'I have been so unhappy that I have been crying'. Each question has four radio button options. At the bottom of the form, there are buttons for 'ADD ORDER' and 'ADD DX (0)', and a 'LEVEL OF SERVICE' indicator.

3. The questions are listed for patient response. Enter them here, then click 'close' to save.

A screenshot of the EPDS form showing the 'Postnatal depression score' and 'EPDS Plan' sections. The 'Postnatal depression score' section has a text input field. The 'EPDS Plan' section includes several checkboxes: 'counseling recommended, patient accept...', 'patient information supplied', 'declined screening', 'counseling recommended, patient accept...', 'self help strategies discussed', and 'plan follow up screenin'. At the bottom of the form, there are buttons for 'Restore', 'Close', and 'Cancel'.

SDOH Screening

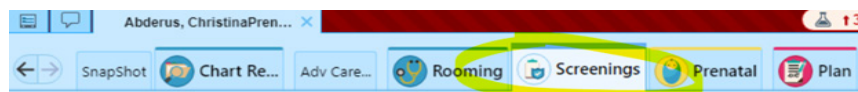
Social drivers of health screenings are used universally on patients systemwide. There are two ways to access these screenings in Epic:

1. Storyboard



Scrolling down on the left sidebar of the patient's file screen will be a storyboard for SDOH topics and some corresponding graphics. Mouse over this section to open a window that lists each separate screening as well as whether the information that has been logged in the file. Individual screening questions can be accessed by clicking on them from this screen.

2. Toolbar



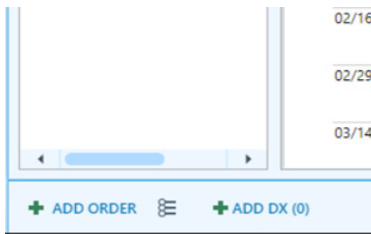
All the SDOH screenings can also be found within the Screenings tab, located on the toolbar at the top of the patient file screen. This tab also includes all other screenings.

3. Complete the SDOH screenings for each section with your patient. Depending upon their responses, they may screen as positive and needing additional support in several areas. Discuss this with your patient and obtain their consent to create additional referrals and make additional connections, so they are aware that somebody will be reaching out. Some SDOH needs like food insecurity concerns may have a local response like a MaineHealth food pantry or using a smartphrase to pull in information on local resources. In addition, a referral to the Patient Assistance Line (PAL) connects patients to a team who can discuss available resources and follow up.

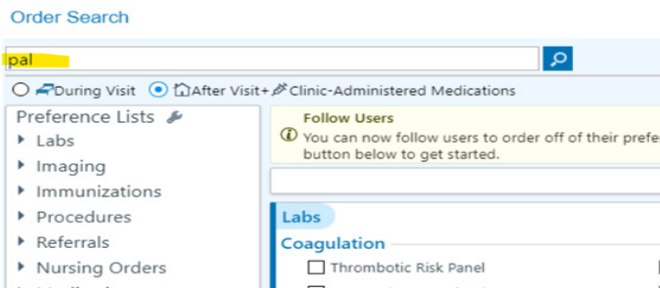
Making A Referral to the Patient Assistance Line (PAL)

Patients can be referred to the PAL for needs such as health insurance, medications, transportation, housing and food insecurity.

1. Go to the Encounters tab and click 'add order'



2. In the dialogue box, search for “pal” or referral code REF155



3. Select the proper referral:

Order Search

pal

Browse Preference List Facility List

El Panels (No results found) Search panels by user

After Visit Medications (No results found)

Clinic-Administered Medications (ALT+Shift+3)

Name	Dose	Freq...	DI...	DI...	Ref	End ...	Copay	Coverage	Formulary	Dr...
paliperidone palmitate 78 mg/0.5mL injection	78 mg	Once								Ge...
paliperidone palmitate (INVEGA TRINZA) injection 273 mg/0.875...	273 mg	Once								Ge...

After Visit Procedures (ALT+Shift+4)

Pr Code	Name	Class	Type
822155	Referral to MedAccess and Patient Assistance Line (PAL)	Internal Referral	Output Ref
REF210051	AMB Referral to MCMG Palliative Care (aka Palliative)		Output Ref

4. This will open the referral, where you can note the reason(s) for referral and add additional comments about the individual situation.

Referral to MedAccess and Patient Assistance Line (PAL)

Reason for Referral

Financial Resource Strain Food Insecurity Intimate Partner Violence

Physical Activity Social Connections Stress Transportation Resources

Housing Advice Medication Assistance Health Insurance Legal Resources

Finding Jobs/Employment Dental/Eye Care resources

Referral Priority: Routine Next available appt Within 2-4 weeks Urgent (within 1 week) 24 - 48 hours Emergency (within 24 hrs)

Class: External Referral Internal Referral

Provider Specialty: Care Management Care Management

Ref to Department:

Referral: To Location/POS: By Provider: To Provider:

Number of Visits: 3

Comments: Describe the support or resources needed

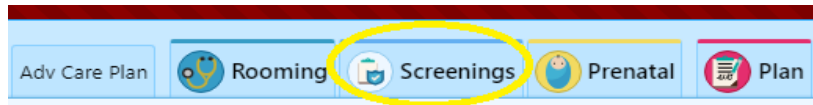
Next Required

The PAL team will follow up with this request. In addition to an Epic referral, the PAL team can be reached by phone: 1-833-MHHELP1 (1-833-644-3571)/661-5500, or by email at patientassistline@mainehealth.org

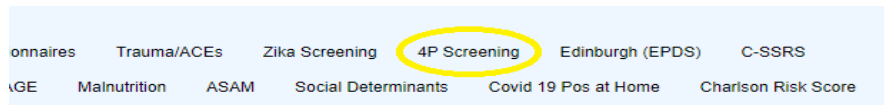
4P

The 4P screener is a simple, validated tool that helps to determine concerns around substance use for the patient or the patient's family.

1. In the patient's Epic chart, select the 'Screenings' tab from the top toolbar:



2. After opening the Screenings tab, you can scroll down to the screening, or select the title from the top to have it scroll directly to the screening for you.



3. The questions are listed, including additional room to enter comments to register the patient's response. Enter them here, then click 'close' to save.

A screenshot of the '4p Screening' form. The form has a title bar with '4p Screening' and a green background. Below the title bar, there are four sections: 'Parents', 'Partner', 'Past', and 'Present'. Each section contains a question and two buttons: 'Yes' and 'No'. The 'Yes' button has a text input field next to it. The 'No' button has a dropdown arrow next to it. At the bottom of the form, there are three buttons: 'Restore', 'Close', and 'Cancel'.

4. If a patient's responses suggest an SUD may be present, additional more specific screening is likely necessary. The provider can also utilize brief interventional strategies to continue the conversation. Screening tools to use for a more enhanced evaluation are the DAST 10 or AUDIT.
 - a. The Drug Abuse Screen Test (DAST-10) is a validated screening tool that yields a quantitative index of the degree of consequences related to substance use. The instrument takes approximately 5 minutes to administer and may be given in either a self-report or interview format.
 - b. The Alcohol Use Disorders Identification Test (AUDIT) is also a validated screening tool that is used to assess alcohol consumption, drinking behaviors, and alcohol-related problems. It is also available in either a clinician-administered version or as a self-reported tool. To use the AUDIT tool effectively, it is critical to understand the definition of a "standard drink." A chart illustrating the approximate number of standard drinks in different alcoholic beverages is included for reference.

HCV Screening

All pregnant women should be screened for the Hepatitis C virus (HCV) using an antibody test (HCV Ab) at least once during pregnancy, ideally using a test that automatically detects the HCV viral load or HCV antigen (i.e., "reflexes" to HCV RNA or HCV core antigen if the antibody screen is positive). Pregnant patients with ongoing risk factors (e.g., continued substance use, risky sexual behaviors) should be re-screened if it has been more than three months since their last antibody test. Pregnant patients at risk for HCV may be at an increased risk of other infectious diseases (e.g., Hepatitis B, HIV, sexually transmitted infections) and should be monitored accordingly.

An HCV positive antibody means that the patient has been exposed to the HCV virus. If the patient's HCV antigen testing is negative, it suggests that either the patient's immune system has successfully cleared the virus, or the patient has been successfully treated previously using an antiviral medication. If the patient is positive for the HCV antigen, the amount of the virus is typically quantified (see example below). In the case of a positive viral load, the patient should be treated postpartum after cessation of breastfeeding.

Component	6 mo ago
Ref Range & Units	
Hepatitis C RNA QN NAA	3,251,769 !
IU/mL	
Comment: HCV quantification range is 10 IU/mL to 100,000,000 IU/mL.	

Toxicology Screening

Understanding toxicology screening and its limitations is important for providing optimal care to women who use substances during pregnancy. Universal SUD screening using a validated verbal tool (e.g., 4P) is recommended but, if there is concern for an SUD, toxicology screening can be considered. MaineMOM developed proposed guidance for toxicology screening in pregnant patients.⁷⁸ Standardization of criteria for toxicology screening enhances consistency and fairness while reducing the risk of explicit or implicit bias in decision making.

It is critical that the patient understands and consents to toxicology screening. Timing around specimen collection is very important especially during the delivery hospitalization as the patient may be administered fentanyl and other medications. In general, collecting the specimen as early as possible in the hospitalization is recommended. Patients in treatment for OUD often receive toxicology screening at every visit. Toxicology screening can be a source of motivation particularly in patients with limited returns to use. They are often one of the best ways of objectively documenting a patient's recovery.

Providers should be familiar with the toxicology screening options available in their local health system. It is recommended to use a lab order that automatically reflexes to confirmatory testing for positive results. One example of this is: *TOX PANEL + BUPRENORPHINE SCRIN + QN* which is an immunoassay screen that automatically reflexes to confirmatory testing for all positive results. Some providers choose to not confirm the presence of all substances (e.g., buprenorphine if prescribed) but rather specific substances (e.g., fentanyl or cocaine). If it is essential to know whether a substance was truly present in a specimen, it is vital to perform confirmatory testing.

Postnatal Transitions of Care

Breastfeeding Guidelines

Breastfeeding decision making for women with SUD is often complex. While there is strong evidence that breastfeeding has positive effects on maternal and infant health, an awareness of how previous physical and sexual trauma may impact the decision to breastfeed is essential. As with all aspects of care for pregnant and postpartum patients with SUD, breastfeeding conversations should be trauma-informed, and providers should encourage patients to make the decision that is best for them.

Patients with SUD often receive inconsistent advice and recommendations about breastfeeding and policies vary across organizations and healthcare systems. Consistent breastfeeding policies mitigate bias, facilitate consistency, and empower individuals with SUD. Historically, breastfeeding recommendations were often based upon toxicology testing results during pregnancy. However, more recent data suggest that toxicology testing performed at delivery (and not during pregnancy) had the strongest association with ongoing non-prescribed substance use postpartum.⁷⁹

The most recent recommendations from the Academy of Breastfeeding Medicine state that, in general, breastfeeding is recommended among mothers who stop nonprescribed substance use by the time of delivery, and they should continue to receive ongoing postpartum care, such as lactation support and SUD treatment.⁸⁰ Ongoing monitoring of stability in treatment is essential and patients should be counseled not to breastfeed in the context of returns to use.

Breastfeeding is compatible with all forms of MOUD and there are no longer dose specific recommendations for methadone. Women with HCV can be supported in breastfeeding provided their nipples are not cracked or bleeding. Studies show a strong correlation between breastfeeding and a reduced length of infant hospital stay, a decreased severity of neonatal opioid withdrawal syndrome (NOWS), and a decreased necessity of pharmacological interventions in infants diagnosed with NOWS.⁸¹ However, infants experiencing NOWS can be more irritable, and this can impact both latch as well as weight gain (often leading to formula supplementation) and can be a source of frustration for patients. Collaboration with lactation specialists can be especially helpful in these situations.

Contraception

Per recommendations from the American College of Obstetricians and Gynecologists, contraception and reproductive health services should be available and regularly offered to patients in SUD treatment, including patients in the postnatal stage.⁸² Long-acting reversible contraception (LARC) including the intrauterine device (IUD) and the birth control implant are highly effective in preventing pregnancy. They last for several years and are easy to use. Both methods are reversible—if a patient desires pregnancy, LARCs can be removed at any time.⁸³ Both patients with and without SUD should be counseled about contraception in the same manner to ensure that conversations are free from stigma and coercion.

Continuation of Treatment

The postpartum period can be a stressful and vulnerable time for individuals with SUD. Patients participating in MaineMOM are eligible to remain in the program for up to 12 months postpartum and this is encouraged to avoid disruptions in care. If patients choose to seek care in other settings, warm hand-offs are key. As with other chronic conditions, SUD treatment and MOUD should be continued to enhance recovery and well-being while reducing the risks of any complications.

Additional Resources

Working with the Office of Child & Family Services

Working with the Office of Child and Family Services (OCFS) is often a tense situation and can be challenging to navigate with patients in any case, but certainly in the context of perinatal SUD. Navigating making mandated reports while also maintaining a relationship with a patient can be tricky, but it is important to note that while there is a high likelihood of OCFS involvement in cases relating to SUD, it does not automatically imply that all children born to a parent with SUD will be abused or in danger. However, it would be useful to develop a relationship with your patients that can be supportive in this time, and there are options in your role that can provide an ally to parents as they navigate a difficult situation.

One resource is a Communication Tool developed by the Child and Family Health team within CHI here at MaineHealth. Often what patients need most is advocacy and support in managing the complexity of the situation. This tool is designed to help organize communications, plans and contact information. Patients have space to note their contact attempts to their case worker or attorney, keep track of tasks they need to complete and space for notes to jot down questions they want to be sure to ask. The document also contains a page to write down contact information for the patient's Peer Coach if applicable. Ideally this document is completed and used with the patient, making the tool a potentially important resource for advocacy to demonstrate a patient's commitment to the plan, completing tasks and communicating with the case worker.

A copy of the document is included in the following pages.

Task & Communication Organizing Tool

DHHS Office of Children and Family Services

DHHS Caseworker Name:

Caseworker Email:

Caseworker Phone Number:

Contact Log

Date	Time	Comments/Notes

Tasks to Complete

Use this to note the tasks required per your DHHS plan:

- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

Concerns & Questions

Use this section to jot down concerns and questions you want to be sure to follow up on:

More on other side

Task & Communication Organizing Tool

Upcoming Visits

Date	Time	Location

Upcoming Family Team Meetings with OCFS

Date	Time	Location

Task & Communication Organizing Tool

Attorney Contact Information

Attorney's Name:

Attorney's Email:

Attorney's Phone Number:

Contact Log

Date	Time	Comments/Notes

Tips & Reminders

- If you have a request out to your caseworker or attorney and you haven't heard back within 2-3 business days, it's appropriate and acceptable to reach out again.
- You can ask for help making phone calls from your healthcare team or peer recovery coach.

Peer Support

Peer Coach Contact Information

Peer Coach's Name:

Peer Coach's Phone Number:

Use this box to jot down questions, thoughts or things you'd like help with:

Emergency Numbers

Warm Line: 1-866-771-9276

Crisis Line: 1-888-568-1112

United Way 211: 211

Suicide and Crisis Line: 988 (text or call) or [lifeline.org](https://www.lifeline.org) to chat

Domestic Violence Helpline: 1-866-834-HELP (4357)

Sexual Assault Helpline: 1-800-871-7741

Patient Education for MaineMOM

MaineMOM is a program designed to support pregnant patients with SUD holistically, addressing their perinatal medical needs, as well as their substance use disorder treatment and any identified SDOH needs.

The informational patient education document is accessible via Form ID 150505. If you want to use this item, please check the portal to be sure you are using the most up-to-date file.

References

- ¹Centers for Disease Control and Prevention. (2022, October 5). Substance use disorders (SUDS). Centers for Disease Control and Prevention. <https://www.cdc.gov/drugoverdose/featured-topics/substance-use-disorders/index.html>
- ²Bryant, D. J., Coman, E. N., & Damian, A. J. (2020). Association of Adverse Childhood Experiences (ACES) and Substance Use Disorders (SUDS) in a multi-site safety net healthcare setting. *Addictive Behaviors Reports*, 12. <https://doi.org/10.1016/j.abrep.2020.100293>
- ³U.S. Department of Health and Human Services. (2024, March). Substance use and co-occurring mental disorders. National Institute of Mental Health. <https://www.nimh.nih.gov/health/topics/substance-use-and-mental-health>
- ⁴MaineHealth. (2021). Addressing maternal opioid misuse. <https://www.mainehealth.org/about-mainehealth/health-index-initiative/health-index-priority-behavioral-health/addressing-maternal-opioid-misuse-through-statewide-grant>
- ⁵Ailes, E. C., Dawson, A. L., Lind, J. N., Gilboa, S. M., Frey, M. T., Broussard, C. S., & Honein, M. A. (2015, January 23). Opioid prescription claims among women of reproductive age - united states, 2008–2012. Centers for Disease Control and Prevention. https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6402a1.htm?s_cid=mm6402a1_x
- ⁶Committee opinion no. 711 summary: Opioid use and opioid use disorder in pregnancy. (2017). *Obstetrics & Gynecology*, 130(2), 488–489. <https://doi.org/10.1097/aog.0000000000002229>
- ⁷Han, B., Compton, W. M., Einstein, E. B., Elder, E., & Volkow, N. D. (2023). Pregnancy and postpartum drug overdose deaths in the US before and during the COVID-19 pandemic. *JAMA Psychiatry*. <https://doi.org/10.1001/jamapsychiatry.2023.4523>
- ⁸Pallatino C, Chang JC, Krans EE. The Intersection of Intimate Partner Violence and Substance use among Women with Opioid use Disorder. *Substance Abuse*. 2021;42(2):197-204. doi:10.1080/08897077.2019.1671296
- ⁹Ogden SN, Dichter ME, Bazzi AR. Intimate partner violence as a predictor of substance use outcomes among women: A systematic review. *Addict Behav*. 2022 Apr;127:107214. doi: 10.1016/j.addbeh.2021.107214. Epub 2021 Dec 18. PMID: 34933089; PMCID: PMC10007694.
- ¹⁰Menschner, C., & Maul, A. (2016, April). Key Ingredients for Successful Trauma-Informed Care Implementation. SAMHSA. https://www.samhsa.gov/sites/default/files/programs_campaigns/childrens_mental_health/atc-whitepaper-040616.pdf
- ¹¹Polcin DL. Co-occurring Substance Abuse and Mental Health Problems among Homeless Persons: Suggestions for Research and Practice. *J Soc Distress Homeless*. 2016;25(1):1-10. doi: 10.1179/1573658X15Y.0000000004. Epub 2015 Aug 26. PMID: 27092027; PMCID: PMC4833089.
- ¹³MaineHealth MOUD Guidelines, 2024
- ¹⁴Smith, G., O'Connor, A., & Letourneau, L. (2020, March). Maine Opioid Response Clinical Advisory Committee: Proposed Position on the Use of Buprenorphine-Naloxone in Pregnancy . https://www.maine.gov/future/sites/maine.gov/future/files/inline-files/Combination%20buprenorphine%20naloxone%20pregnancy_Clin%20Adv%20Comm%20Guidance_GOPIF_03-20.pdf

- ¹⁴Waiver elimination (mat act). SAMHSA. (n.d.). <https://www.samhsa.gov/medications-substance-use-disorders/waiver-elimination-mat-act>
- ¹⁵127th Maine State Legislature. (n.d.). Public law, Chapter 488, an Act to prevent opiate abuse by strengthening the Controlled Substances Prescription Monitoring Program. https://legislature.maine.gov/legis/bills/bills_127th/chapters/PUBLIC488.asp
- ¹⁶Thakrar, K., Nenner, K., & Agmas, W. (2020). Harm reduction services to prevent and treat infectious diseases in people who use drugs. *Infectious Disease Clinics of North America*, 34(3), 605–620. <https://doi.org/10.1016/j.idc.2020.06.013>
- ¹⁷Weber A, Miskle B, Lynch A, Arndt S, Acion L. Substance Use in Pregnancy: Identifying Stigma and Improving Care. *Subst Abuse Rehabil*. 2021 Nov 23;12:105-121. doi: 10.2147/SAR.S319180. PMID: 34849047; PMCID: PMC8627324.
- ¹⁸Ashford RD, Curtis B, Brown AM. Peer-delivered harm reduction and recovery support services: initial evaluation from a hybrid recovery community drop-in center and syringe exchange program. *Harm Reduct J*.
- ¹⁹Fernando S, Hawkins J, Kniseley M, Sikora M, Robson J, Snyder D, Battle C, Salmon A. The Overdose Crisis and Using Alone: Perspectives of People Who Use Drugs in Rural and Semi-Urban Areas of British Columbia. *Subst Use Misuse*. 2022;57(12):1864-1872. doi: 10.1080/10826084.2022.2120361. Epub 2022 Sep 12. PMID: 36096482.
- ²⁰Goldman JE, Waye KM, Periera KA, Krieger MS, Yedinak JL, Marshall BDL. Perspectives on rapid fentanyl test strips as a harm reduction practice among young adults who use drugs: a qualitative study. *Harm Reduct J*. 2019 Jan 8;16(1):3. doi: 10.1186/s12954-018-0276-0. PMID: 30621699; PMCID: PMC6325714.
- ²¹<https://www.maine.gov/dhhs/mecdc/infectious-disease/hiv-std/services/syringe-service-programs.shtml>
- ²²<https://legislature.maine.gov/statutes/17-A/title17-Asec1111-B.html>
- ²³<https://knowyouroptions.me/>
- ²⁴The fentanyl epidemic. Maine Drug Data Hub. (n.d.). <https://mainedrugdata.org/the-fentanyl-epidemic/#what>
- ²⁵MaineHealth offers a Demystifying Toxicology Testing Podcast. The podcast is free and provides 1 hour of CME credit and can be found at: <https://rise.articulate.com/share/SX67va9aUY5WRgFJzUmZFvNclpr9AMqF>. The Maine SUD Learning Community offers the Urine Toxicology Testing Webinar at: <https://mesudlearningcommunity.org/webinar-video-resources/?playlist=f0448f5&video=31069bc>
- ²⁶Jamieson, D. (n.d.). If you're pregnant, you should be screened for hepatitis B and C. here's why. ACOG. <https://www.acog.org/womens-health/experts-and-stories/the-latest/if-youre-pregnant-you-should-be-screened-for-hepatitis-b-and-c-heres-why#:~:text=Hepatitis%20B%20and%20C%20are,testing%20during%20each%20pregnancy%20too>.
- ²⁷Abbasi F, Almukhtar M, Fazlollahpour-Naghibi A, Alizadeh F, Behzad Moghadam K, Jafari Tadi M, Ghadimi S, Bagheri K, Babaei H, Bijani MH, Rouholamin S, Razavi M, Rezaeinejad M, Chemaitelly H, Sepidarkish M, Farid-Mojtahedi M, Rostami A. Hepatitis C infection seroprevalence in pregnant women worldwide: a systematic review and meta-analysis. *EclinicalMedicine*. 2023 Nov 17;66:102327. doi: 10.1016/j.eclinm.2023.102327. PMID: 38045801; PMCID: PMC10692665.
- ²⁸National Trends in Hepatitis C Infection by Opioid Use Disorder Status Among Pregnant Women at Delivery Hospitalization — United States, 2000–2015. <https://www.cdc.gov/mmwr/volumes/68/wr/mm6839a1.htm>
- ²⁹<https://www.maine.gov/dhhs/sites/maine.gov.dhhs/files/inline-files/MaineMOM-HepatitisC-Treatment-Guide-050823.pdf>
- ³⁰Anthony E Ades, Fabiana Gordon, Karen Scott, Intira J Collins, Thorne Claire, Lucy Pembrey, Elizabeth Chappell, Eugènia Mariné-Barjoan, Karina Butler, Giuseppe Indolfi, Diana M Gibb, Ali Judd, Overall Vertical Transmission of Hepatitis C Virus, Transmission Net of Clearance, and Timing of Transmission, *Clinical Infectious Diseases*, Volume 76, Issue 5, 1 March 2023, Pages 905–912, <https://doi.org/10.1093/cid/ciac270>
- ³¹Weller AE, Crist RC, Reiner BC, Doyle GA, Berrettini WH. Neonatal Opioid Withdrawal Syndrome (NOWS): A Transgenerational Echo of the Opioid Crisis. *Cold Spring Harb Perspect Med*. 2021 Mar 1;11(3):a039669. doi: 10.1101/cshperspect.a039669. PMID: 32229609; PMCID: PMC7919394.

- ³² U.S. Department of Health and Human Services. (2023, May 1). “Eat, Sleep, Console” reduces hospital stay and need for medication among opioid-exposed infants. National Institutes of Health. <https://www.nih.gov/news-events/news-releases/eat-sleep-console-reduces-hospital-stay-need-medication-among-opioid-exposed-infants>
- ³³ Maine Clinical Opioid Advisory Committee: Proposed Position on the Perioperative Management of Patients Prescribed Buprenorphine for Opioid Use Disorder (OUD). https://www.maine.gov/future/sites/maine.gov/future/files/inline-files/Perioperative%20Pain%20Mngmnt%20Guidance_ME%20Opioid%20Clinical%20Adv%20Comm_GOPIF_08-2020.pdf
- ³⁴ St Marie B. Health care experiences when pain and substance use disorder coexist: “just because i’m an addict doesn’t mean i don’t have pain”. *Pain Med.* 2014 Dec;15(12):2075-86. doi: 10.1111/pme.12493. Epub 2014 Jul 8. PMID: 25041442; PMCID: PMC4300296.
- ³⁵ Siegel MR, Mahowald GK, Uljon SN, James K, Leffert L, Sullivan MW, Hernandez SJ, Gray JR, Schiff DM, Bernstein SN. Fentanyl in the labor epidural impacts the results of intrapartum and postpartum maternal and neonatal toxicology tests. *Am J Obstet Gynecol.* 2023 Jun;228(6):741.e1-741.e7. doi: 10.1016/j.ajog.2022.11.1293. Epub 2022 Nov 23. PMID: 36427599.
- ³⁶ Committee Opinion No. 711 Summary: Opioid Use and Opioid Use Disorder in Pregnancy. *Obstetrics & Gynecology* 130(2):p 488-489, August 2017. | DOI: 10.1097/AOG.0000000000002229
- ³⁷ Liang A, Anderson E, Kalmin M, et al. Buprenorphine initiation for pregnant patients with opioid use disorder: A multicenter observational study of California bridge sites. *Ann Emerg Med.* 2022 Oct; 80(4):S30. doi.org/10.1016/j.annemergmed.2022.08.080
- ³⁸ Bell J, Towers CV, Hennessy MD, et al. Detoxification from opiate drugs during pregnancy. *Am J Obstet Gynecol.* 2016 Sep;215(3):374.e1-6. doi: 10.1016/j.ajog.2016.03.015. Epub 2016 Mar 17. PMID: 26996987.
- ³⁹ US SAMHSA. Buprenorphine quick start guide. <https://www.samhsa.gov/sites/default/files/quick-start-guide.pdf>
- ⁴⁰ Kelly JC, Raghuraman N, Stout MJ, et al. Home induction of buprenorphine for treatment of opioid use disorder in pregnancy. *Obstet Gynecol.* 2021 Oct 1;138(4):655-659. doi: 10.1097/AOG.0000000000004539. PMID: 34623078.
- ⁴¹ Junn S, Tugarinov N, Mark K. Low-dose induction of buprenorphine in pregnancy: A case series. *J Addict Med.* 2024 Jan-Feb 01;18(1):62-64. doi: 10.1097/ADM.0000000000001233. Epub 2023 Oct 20. PMID: 37862120.
- ⁴² Berry M, Kiefer M, Hinely K. et al. High-dose buprenorphine initiation in the management of opioid use disorder in pregnancy. *Obstetrics & Gynecology* 143(6):p 815-818, June 2024. | DOI: 10.1097/AOG.0000000000005572
- ⁴³ California Department of Healthcare Services CA Bridge Program. Buprenorphine (bup) quick start in pregnancy. <https://bridgetotreatment.org/resource/buprenorphine-quick-start-in-pregnancy/>
- ⁴⁴ MaineMOM programs are searchable by zip code at www.mainemom.org.
- ⁴⁵ Grahan B. Buprenorphine initiation approaches in pregnancy. <https://www.hennepinhealthcare.org/wp-content/uploads/2022/06/Buprenorphine-pregnancy-induction-2022.6.28.pdf>

- ⁴⁶Maine State Legislature. (n.d.). Title 22, §4011-b: Notification of prenatal exposure to drugs or having a fetal alcohol spectrum disorder. <https://www.mainelegislature.org/legis/statutes/22/title22sec4011-B.html#:~:text=A%20health%20care%20provider%20involved,resulted%20from%20or%20have%20likely>
- ⁴⁷<https://www.maine.gov/dhhs/mecdc/population-health/mch/plan-safe-care.shtml>
- ⁴⁸Gosdin LK, Deputy NP, Kim SY, Dang EP, Denny CH. Alcohol Consumption and Binge Drinking During Pregnancy Among Adults Aged 18–49 Years — United States, 2018–2020. *MMWR Morb Mortal Wkly Rep* 2022;71:10–13. DOI: <http://dx.doi.org/10.15585/mmwr.mm7101a2>
- ⁴⁹Oh SS, Jee Y, Park EC, Kim YJ. Alcohol Use Disorders and Increased Risk of Adverse Birth Complications and Outcomes: An 11-Year Nationwide Cohort Study. *Int J Environ Res Public Health*. 2020 Nov 17;17(22):8515. doi: 10.3390/ijerph17228515. PMID: 33213014; PMCID: PMC7698577.
- ⁵⁰Sundermann AC, Zhao S, Young CL, Lam L, Jones SH, Velez Edwards DR, Hartmann KE. Alcohol Use in Pregnancy and Miscarriage: A Systematic Review and Meta-Analysis. *Alcohol Clin Exp Res*. 2019 Aug;43(8):1606-1616. doi: 10.1111/acer.14124. Epub 2019 Jul 3. PMID: 31194258; PMCID: PMC6677630.
- ⁵¹Lees B, Mewton L, Jacobus J, Valadez EA, Stapinski LA, Teesson M, Tapert SF, Squeglia LM. Association of Prenatal Alcohol Exposure With Psychological, Behavioral, and Neurodevelopmental Outcomes in Children From the Adolescent Brain Cognitive Development Study. *Am J Psychiatry*. 2020 Nov 1;177(11):1060-1072. doi: 10.1176/appi.ajp.2020.20010086. Epub 2020 Sep 25. PMID: 32972200; PMCID: PMC7924902.
- ⁵²National Institute on Alcohol Abuse and Alcoholism. Understanding Fetal Alcohol Spectrum Disorders. <https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/understanding-fetal-alcohol-spectrum-disorders>
- ⁵³Kelty E, Terplan M, Greenland M, Preen D. Pharmacotherapies for the Treatment of Alcohol Use Disorders During Pregnancy: Time to Reconsider? *Drugs*. 2021 May;81(7):739-748. doi: 10.1007/s40265-021-01509-x. Epub 2021 Apr 8. PMID: 33830479.
- ⁵⁴Towers CV, Katz E, Weitz B, Visconti K. Use of naltrexone in treating opioid use disorder in pregnancy. *Am J Obstet Gynecol*. 2020 Jan;222(1):83.e1-83.e8. doi: 10.1016/j.ajog.2019.07.037. Epub 2019 Jul 31. Erratum in: *Am J Obstet Gynecol*. 2023 Jun;228(6):770. doi: 10.1016/j.ajog.2022.04.003. PMID: 31376396.
- ⁵⁵Gambling L, McArdle HJ. Iron, copper and fetal development. *Proceedings of the Nutrition Society*. 2004;63(4):553-562. doi:10.1079/PNS2004385
- ⁵⁶DeVido J, Bogunovic O, Weiss RD. Alcohol use disorders in pregnancy. *Harv Rev Psychiatry*. 2015 Mar-Apr;23(2):112-21. doi: 10.1097/HRP.000000000000070. PMID: 25747924; PMCID: PMC4530607.
- ⁵⁷Young-Wolff KC, Adams SR, Alexeeff SE, et al. Prenatal Cannabis Use and Maternal Pregnancy Outcomes. *JAMA Intern Med*. 2024;184(9):1083–1093. doi:10.1001/jamainternmed.2024.3270
- ⁵⁸Avalos LA, Adams SR, Alexeeff SE, Oberman NR, Does MB, Ansley D, Goler N, Padon AA, Silver LD, Young-Wolff KC. Neonatal outcomes associated with in utero cannabis exposure: a population-based retrospective cohort study. *Am J Obstet Gynecol*. 2024 Jul;231(1):132.e1-132.e13. doi: 10.1016/j.ajog.2023.11.1232. Epub 2023 Nov 27. PMID: 38029850; PMCID: PMC11128475.

- ⁵⁹ Gutierrez Alvarez AV, Rubin D, Pina P, Velasquez MS. Neurodevelopmental outcomes and prenatal exposure to marijuana. *Pediatrics* May 2018; 142 (1_MeetingAbstract): 787. 10.1542/peds.142.1MA8.787
- ⁶⁰ Bandoli G, Delker E, Schumacher BT, Baer RJ, Kelly AE, Chambers CD. Prenatal cannabis use disorder and infant hospitalization and death in the first year of life. *Drug Alcohol Depend.* 2023 Jan 1;242:109728. doi: 10.1016/j.drugalcdep.2022.109728. Epub 2022 Dec 9. PMID: 36516553; PMCID: PMC10363398.
- ⁶¹ Deutsch SA, Loisel CE, Hossain J, De Jong A. Sleep-Related Sudden Unexpected Infant Death Among Infants Prenatally Substance Exposed. *Pediatrics* December 2024; 154 (6): e2024067372. 10.1542/peds.2024-067372
- ⁶² Lochte B, Cooper ZV, Mooney LJ. Current treatments for cannabis use disorder. *Psychiatric Times* December 2022 Vol 39, Issue 12
- ⁶³ Mason BJ, Crean R, Goodell V, Light JM, Quello S, Shadan F, Buffkins K, Kyle M, Adusumalli M, Begovic A, Rao S. A proof-of-concept randomized controlled study of gabapentin: effects on cannabis use, withdrawal and executive function deficits in cannabis-dependent adults. *Neuropsychopharmacology.* 2012 Jun;37(7):1689-98. doi: 10.1038/npp.2012.14. Epub 2012 Feb 29. PMID: 22373942; PMCID: PMC3358737.
- ⁶⁴ Angulo MI. Cannabinoid Hyperemesis Syndrome. *JAMA.* 2024;332(17):1496. doi:10.1001/jama.2024.9716
- ⁶⁵ Kipling L, Bombard J, Wang X, Cox S. Cigarette Smoking Among Pregnant Women During the Perinatal Period: Prevalence and Health Care Provider Inquiries — Pregnancy Risk Assessment Monitoring System, United States, 2021. *MMWR Morb Mortal Wkly Rep* 2024;73:393–398. DOI: <http://dx.doi.org/10.15585/mmwr.mm7317a2>.
- ⁶⁶ Wickström R. Effects of nicotine during pregnancy: human and experimental evidence. *Curr Neuropharmacol.* 2007 Sep;5(3):213-22. doi: 10.2174/157015907781695955. PMID: 19305804; PMCID: PMC2656811.
- ⁶⁷ Chamberlain C, O'Mara-Eves A, Porter J, Coleman T, Perlen SM, Thomas J, McKenzie JE. Psychosocial interventions for supporting women to stop smoking in pregnancy. *Cochrane Database Syst Rev.* 2017 Feb 14;2(2):CD001055. doi: 10.1002/14651858.CD001055.pub5. PMID: 28196405; PMCID: PMC6472671.
- ⁶⁸ Coleman T, Chamberlain C, Cooper S, Leonardi-Bee J. Efficacy and safety of nicotine replacement therapy for smoking cessation in pregnancy: systematic review and meta-analysis. *Addiction.* 2011 Jan;106(1):52-61. doi: 10.1111/j.1360-0443.2010.03179.x. Epub 2010 Nov 4. PMID: 21054620.
- ⁶⁹ Przulj D, Pesola F, Myers Smith K, McRobbie H, Coleman T, Lewis S, Griffith C, Walton R, Whitmore R, Clark M, Ussher M, Sinclair L, Seager E, Cooper S, Bauld L, Naughton F, Sasieni P, Manyonda I, Hajek P. Helping pregnant smokers quit: a multi-centre randomised controlled trial of electronic cigarettes versus nicotine replacement therapy. *Health Technol Assess.* 2023 Jul;27(13):1-53. doi: 10.3310/AGTH6901. PMID: 37840301; PMCID: PMC10599072.
- ⁷⁰ American Cancer Society. Harmful Chemicals in Tobacco Products. Harmful Chemicals in Tobacco Products | American Cancer Society. <https://www.cancer.org/cancer/risk-prevention/tobacco/carcinogens-found-in-tobacco-products.html#:~:text=Carcinogens,Vinyl%20chloride>
- ⁷¹ Diamanti A, Papadakis S, Schoretsaniti S, Rovina N, Vivilaki V, Gratziou C, Katsaounou PA. Smoking cessation in pregnancy: An update for maternity care practitioners. *Tob Induc Dis.* 2019 Aug 2;17:57. doi: 10.18332/tid/109906. PMID: 31582946; PMCID: PMC6770622.
- ⁷² Rossow I. Illicit drug use and oral health. *Addiction.* 2021 Nov;116(11):3235-3242. doi: 10.1111/add.15360. Epub 2021 Jan 15. PMID: 33247857.
- ⁷³ Maine Quit Link. <https://mainequitlink.com/>
- ⁷⁴ Woudes TA, Lester BM. Stimulants: How big is the problem and what are the effects of prenatal exposure? *Semin Fetal Neonatal Med.* 2019 Apr;24(2):155-160. doi: 10.1016/j.siny.2019.01.011. Epub 2019 Feb 5. PMID: 30803902.
- ⁷⁵ Kunkler C, Lewis AJ, Almeida R. Methamphetamine exposure during pregnancy: A meta-analysis of child developmental outcomes. *Neurosci Biobehav Rev.* 2022 Jul;138:104714. doi: 10.1016/j.neubiorev.2022.104714. Epub 2022 May 31. PMID: 35661684.
- ⁷⁶ Letourneau L, O'Connor A, Smith G. Maine Clinical Opioid Advisory Committee: Treatment of Co-Occurring Stimulant Use Disorder in Patients with Opioid Use Disorder (OUD). Stimulant Recs_ME Opioid Clin Adv Comm_GOPIF_10-2020.pdf

- ⁷⁷Smid MC, Metz TD, Gordon AJ. Stimulant Use in Pregnancy: An Under-recognized Epidemic Among Pregnant Women. *Clin Obstet Gynecol*. 2019 Mar;62(1):168-184. doi: 10.1097/GRF.0000000000000418. PMID: 30601144; PMCID: PMC6438363.
- ⁷⁸American Society of Addiction Medicine . (2021, August 9). Intimate partner violence and co-occurring substance abuse/addiction. <https://www.asam.org/blog-details/article/2021/08/09/intimate-partner-violence-and-co-occurring-substance-abuse-addiction#:~:text=Substance%20abuse%20has%20been%20found%20to%20co-occur%20in,role%20in%20IPV%20by%20precipitating%20or%20exacerbating%20violence>.
- ⁷⁹Maine State Legislature. (n.d.). Title 22, §4011-b: Notification of prenatal exposure to drugs or having a fetal alcohol spectrum disorder. <https://www.mainelegislature.org/legis/statutes/22/title22sec4011-B.html#:~:text=A%20health%20care%20provider%20involved,resulted%20from%20or%20have%20likely>
- ⁸⁰Harris M, Joseph K, Hoepfner B, Wachman EM, Gray JR, Saia K, Wakeman S, Bair-Merritt MH, Schiff DM. A Retrospective Cohort Study Examining the Utility of Perinatal Urine Toxicology Testing to Guide Breastfeeding Initiation. *J Addict Med*. 2021 Jul-Aug 01;15(4):311-317. doi: 10.1097/ADM.0000000000000761. PMID: 33060464; PMCID: PMC8044259.
- ⁸¹Harris M, Schiff DM, Saia K, Muftu S, Standish KR, Wachman EM. Academy of Breastfeeding Medicine Clinical Protocol #21: Breastfeeding in the Setting of Substance Use and Substance Use Disorder (Revised 2023). *Breastfeed Med*. 2023 Oct;18(10):715-733. doi: 10.1089/bfm.2023.29256.abm. PMID: 37856658; PMCID: PMC10775244.
- ⁸²Wu D, Carre C. The Impact of Breastfeeding on Health Outcomes for Infants Diagnosed with Neonatal Abstinence Syndrome: A Review. *Cureus*. 2018 Jul 28;10(7):e3061. doi: 10.7759/cureus.3061. PMID: 30397566; PMCID: PMC6211775.
- ⁸³American College of Obstetricians and Gynecologists. (n.d.). Long-acting reversible contraception (Larc): Intrauterine device (IUD) and Implant. ACOG. <https://www.acog.org/womens-health/faqs/long-acting-reversible-contraception-iud-and-implant>