

# **NNEPQIN**

## SECTION 2: TOOLS BY SUBSTANCE

## Section 2: Tools by Substance

Treatment of a pregnant patient with a substance use disorder must be specialized to the substance(s) that the patient is misusing. This section provides information about perinatal SUD care by substance.

1. [Opioids](#)
  - 1.1. [Provider Materials](#)
    - 1.1.1. [AIM Perinatal Opioid Bundle](#)
    - 1.1.2. [Opioid Use Disorder Clinical Pathway](#)
    - 1.1.3. [Checklist Chart Template](#)
    - 1.1.4. [Facilitating Access to Naloxone and Sample Prescription](#)
    - 1.1.5. [Neonatal Abstinence Syndrome \(NAS\)](#)
    - 1.1.6. [Medication Assisted Treatment for Opioid Use Disorder Pocket Guide](#)
  - 1.2. [Patient Materials](#)
    - 1.2.1. [Sample Letter #1 to Patient about NAS](#)
    - 1.2.2. [Sample Letter #2 to Patient about NAS](#)
    - 1.2.3. [NAS Pamphlet-Caring for your Newborn](#)
    - 1.2.4. [Opioid use and pregnancy](#)
    - 1.2.5. [Opioid use, labor, and childbirth](#)
    - 1.2.6. [Neonatal Abstinence link for parents from March of Dimes](#)
2. [Marijuana](#)
  - 2.1. [Provider Materials](#)
    - 2.1.1. [Current Research from the National Institute on Drug Abuse](#)
  - 2.2. [Patient Materials](#)
    - 2.2.1. [Risks of Marijuana Use during Pregnancy and Breastfeeding](#)
    - 2.2.2. [Today is For Me Campaign](#)
    - 2.2.3. [Cannabis/Marijuana and pregnancy](#)
3. [Alcohol](#)
  - 3.1. [Provider Materials](#)
    - 3.1.1. [Addressing Fetal Alcohol Spectrum Disorders \(FASD\)](#)
    - 3.1.2. [National Organization on Fetal Alcohol Syndrome\(NOFAS\)](#)
    - 3.1.3. [Public Awareness Fact Sheet on FAS from NOFAS](#)
    - 3.1.4. [The Arc: Fetal Alcohol Spectrum Disorders Prevention Project](#)
    - 3.1.5. [Substance Abuse and Mental Health Services Administration: Treatment Improvement Protocols](#)
    - 3.1.6. [Evidence-based “Choices” curriculum for FASD prevention](#)
  - 3.2. [Patient Materials](#)
    - 3.2.1. [Today is For Me](#)
    - 3.2.2. [Centers for Disease Control information and infographics](#)
    - 3.2.3. [March of Dimes](#)
    - 3.2.4. [National Organization on Fetal Alcohol Syndrome](#)
    - 3.2.5. [The Arc: Fetal Alcohol Spectrum Disorders Prevention Project](#)

4. [Tobacco](#)
  - 4.1. [Provider Materials](#)
    - 4.1.1. [Quick Reference for tobacco counseling from Centers for Disease Control](#)
    - 4.1.2. [New Hampshire QUITWORKS](#)
    - 4.1.3. [Vermont 802quits](#)
    - 4.1.4. [Strategies for treating tobacco use for patients with other addictive disorders](#)
    - 4.1.5. [Information on prenatal tobacco risk](#)
    - 4.1.6. [No-cost virtual provider training on best practice for smoking cessation](#)
  - 4.2. [Patient Materials](#)
    - 4.2.1. [Information on prenatal tobacco risk](#)
    - 4.2.2. [New Hampshire QUITnow](#)
    - 4.2.3. [Vermont 802quits](#)
    - 4.2.4. [EPA Smoke-Free Homes Community Action Toolkit](#)
    - 4.2.5. [EPA “smoke free home pledge” for families](#)
    - 4.2.6. [Patient education fact sheet from American College of Nurse Midwives \(ACNM\)](#)
    - 4.2.7. [Smoking during pregnancy fact sheet from March of Dimes](#)
5. [Methamphetamines and Other Stimulants](#)
  - 5.1.1. [Provider Materials](#)
  - 5.1.2. [Patient Materials](#)
6. [Polysubstance Use](#)
  - 6.1. [Patient Materials](#)
    - 6.1.1. [March of Dimes](#)
7. [Synthetic Cathinones \(“Bath Salts”\)](#)
  - 7.1. [Provider Materials](#)
    - 7.1.1. [National Institute on Drug Abuse](#)
  - 7.2. [Patient Materials](#)
    - 7.2.1. [A Drug Called “Bath Salts” Brochure](#)

# 1. Opioids

## SCREENING AND DIAGNOSIS OF OPIOID USE DISORDER

Please see Section 1- Screening and Assessment for more detailed information about the screening process

### 1) CRITERIA FOR A PRESUMED DIAGNOSIS OF OPIOID USE DISORDER (OUD)

- Definition of Opioid Use Disorder: “A problematic pattern of opioid use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period.” (DSM-V)
- The following criteria are used to diagnose Opioid Use Disorder:

DSM-V DIAGNOSTIC CRITERIA	PRESENT/DATE	COMMENTS
1. Opioids are often taken in larger amounts or over a longer period than was intended.		
2. There is a persistent desire or unsuccessful efforts to cut down or control opioid use.		
3. A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects.		
4. Craving, or a strong desire or urge to use opioids.		
5. Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home.		
6. Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids.		
7. Important social, occupational, or recreational activities are given up or reduced because of opioid use.		
8. Recurrent opioid use in situations in which it is physically hazardous.		
9. Continued opioid use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.		
10. Tolerance, as defined by either of the following: a. A need for markedly increased amounts of opioids to achieve intoxication or desired effect. b. A markedly diminished effect with continued use of the same amount. (This may also be true for those taking prescribed opioids, in which case this should not be considered diagnostic of opioid use disorder)		
11. Withdrawal, as manifested by either of the following: a. The characteristic opioid withdrawal syndrome (refer to Criteria A and B of the criteria set for opioid withdrawal). b. Opioids (or a closely related substance) are taken to relieve or avoid withdrawal symptoms (see above – this may also hold true for those taking prescribed opioids).		

The severity of Opioid Use Disorder can be estimated from this table, using the levels described below:

- Mild: Presence of 2–3 symptoms
- Moderate: Presence of 4–5 symptoms
- Severe: Presence of 6 or more symptoms

The clinical opioid withdrawal scale (COWS) may be used to measure severity of symptoms in patients who present in acute withdrawal from opioids. A copy of the COWS checklist can be downloaded here:

<https://www.drugabuse.gov/sites/default/files/files/ClinicalOpiateWithdrawalScale.pdf>

## 2) Levels of care for the treatment of Opioid Use Disorders (OUD)

Pharmacotherapy for OUD is strongly recommended during pregnancy, due to high rates of relapse and poor outcomes when pharmacotherapy is not used (SAMHSA, 2018).

However, the decision to enter treatment for opioid use disorder is not an easy one for pregnant and parenting women, due to stigma and other potential consequences of disclosure. The 2018 SAMHSA *Clinical Guidance* states that “Pregnant women should receive counseling and education on the medical and social consequences of pharmacotherapy for OUD,” noting that “owing to differing state, county, and local laws and regulations, there is no universal approach to assessing the social and legal consequences of legitimate pharmacotherapy for OUD or other substance use during pregnancy” (SAMHSA, 2018, p. 17). Providers counseling women about options should be knowledgeable about the regulatory environment in which their patients live.

**SUPPORTING EVIDENCE AND EXPERT CLINICAL GUIDANCE FOR INITIATING AND MANAGING PHARMACOTHERAPY FOR OUD DURING PREGNANCY CAN BE FOUND IN FACTSHEETS 2-4 OF [CLINICAL GUIDANCE FOR TREATMENT OF PREGNANT AND PARENTING WOMEN WITH OPIOID USE DISORDER AND THEIR INFANTS](#) (SAMHSA, 2018, PP 25-41).**

Treatment for opioid use disorders during pregnancy may occur at several levels of intensity and duration described below. Access to pregnancy-specific treatment varies widely by region. Some programs may not accept pregnant women, and many do not allow children to accompany their mothers.

### Detoxification\*

*Outpatient:* Symptoms of withdrawal may be managed in an outpatient setting if an individuals’ withdrawal symptoms are not life threatening and supports are available to help manage their symptoms without the need of a supervised setting. Withdrawal symptoms are managed by medical staff with medications prescribed as needed.

*Residential (non-hospital):* Symptoms of withdrawal may be managed in a residential, non-hospital setting if an individuals’ withdrawal symptoms are not life threatening but a supervised setting is needed to control their access to alcohol and other drugs. Individuals must be cleared medically to seek care in a residential setting due to medical staff not being available on site. Staff may hold prescribed medication and observe self-administration.

*Inpatient:* Symptoms of withdrawal may be managed in an inpatient, hospital setting if an individuals’ withdrawal symptoms require 24 hour inpatient care. Medical staff monitor withdrawal symptoms and medications are used to manage symptoms.

\*Source: *New Hampshire Bureau of Drug and Alcohol Services*

### Medication Assisted Treatment

FDA approved medications for opioid use disorder are buprenorphine/naloxone, buprenorphine monotherapy, and extended-release injectable naltrexone. Physicians can complete training to be eligible for a waiver to prescribe buprenorphine for this purpose. Changes in Federal legislation also allows Nurse Practitioners, Physicians Assistants, Clinical Nurse Specialists, Certified Registered Nurse Anesthetists, and Certified Nurse Midwives to obtain a buprenorphine waiver.

## Opioid Treatment Programs

Combines behavioral treatment with daily observed treatment with methadone. In the United States, methadone can only be provided for the treatment of addiction at Opioid Treatment Programs certified by the Substance Abuse and Mental Health Services Administration.

### Intensive outpatient programs (IOP)

This service may involve structured individual, group, and family counseling, education, case management, and psychiatric services. Services for adults are provided at least nine hours per week and services for adolescents are provided at least six hours per week

### Residential Services

Onsite full-time programs for individuals who are unable to achieve their goals in their current environment. Services may involve structured individual, group, and family counseling, education, case management, and psychiatric services. The length of the program is based on the needs of the individual.

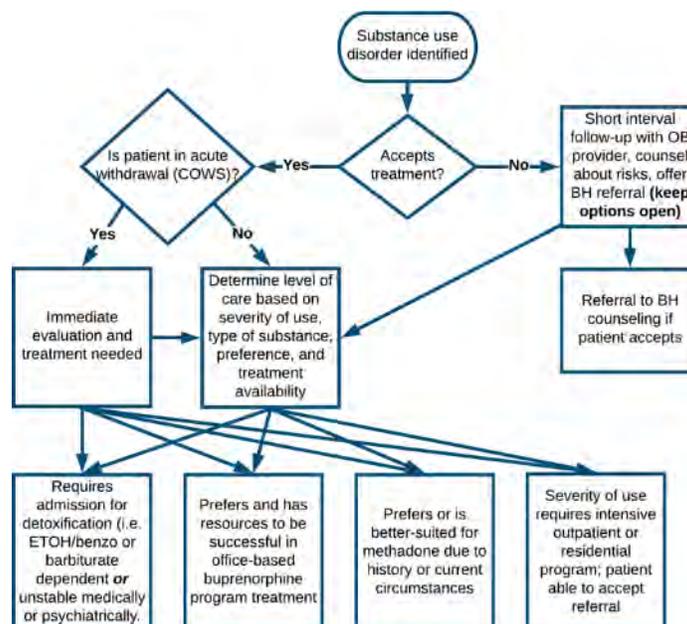
Additional information about levels of treatment for opioid use disorders may be obtained from:

- <http://asamcontinuum.org/knowledgebase/what-are-the-asam-levels-of-care/>
- <https://www.samhsa.gov/medication-assisted-treatment/treatment/methadone>
- <https://www.samhsa.gov/medication-assisted-treatment/treatment/buprenorphine>

### Choosing the right level of care

The severity of a woman's use, availability of treatment, resources, and a woman's conflicting responsibilities and preferences are all factors which will determine the appropriate level of care for a pregnant woman in need of treatment for opioid use disorder. A shared decision making approach will improve the likelihood that the treatment plan will be acceptable to a woman (Friedrichs, et al, 2015; SAMHSA, 2018; WHO, 2014). Providers should be sensitive to the prevalence of trauma history among women with substance use disorders, which may influence what feels safe for a woman (Poole and Greaves, 2012). Most women are highly motivated to seek treatment during pregnancy (Boyd and Marcellus, 2009). The following simple algorithm outlines several key steps in this discussion.

Figure 1. Algorithm for discussing levels of care during pregnancy (BH= Behavioral Health clinician)



## Consent to share information with Treatment Providers

Once OUD has been diagnosed and a patient referred or treatment started, consent to share information between members of the care team is essential. Additional federal rules protect the privacy and confidentiality of substance use treatment records.

A summary of these rules and a sample consent form may be accessed from PCSS-MAT and the American Osteopathic Academy of Addiction Medicine

[https://aoaam.org/resources/Documents/Clinical%20Tools/Sample\\_Consent\\_for\\_release\\_o.pdf](https://aoaam.org/resources/Documents/Clinical%20Tools/Sample_Consent_for_release_o.pdf)

*Please see Additional References section for literature.*

## 1.1. Provider Materials

### 1.1.1. AIM PERINATAL OPIOID BUNDLE



<https://safehealthcareforeverywoman.org/wp-content/uploads/2017/11/Obstetric-Care-for-OUD-Bundle.pdf>

The Alliance for Innovation in Maternal Health (AIM) is a coalition of over 30 organizations working toward reducing preventable maternal mortality and severe morbidity across the U.S. AIM is funded through the federal Health Resources and Services Administration and facilitated by the American College of Obstetricians and Gynecologists (ACOG). AIM's multidisciplinary groups of national experts compile best practices around maternal health conditions and strategies for their implementation to form maternal safety bundles. Metrics for the AIM bundles assist facilities in the process of data driven quality improvement.

In 2017, AIM published the bundle "Obstetric care for women with opioid use disorder" followed by the development of web-based resources including clinical pathways. NNEPQIN has been a leading contributor to this AIM bundle, and we are proud to be an early adopter of the following AIM clinical pathway which is included in it.

### 1.1.2 OPIOID USE DISORDER CLINICAL PATHWAY

The OUD Clinical Pathway was developed by the Alliance for Innovation in Maternal Health (AIM) through a national multidisciplinary consensus process. The following pathway is intended to provide a guide for clinicians seeking to operationalize best practice in the care of pregnant people with substance use disorders.

#### ANTEPARTUM CARE (OUTPATIENT)

#### UPON ENTRY INTO CARE AND IDENTIFICATION OF SUBSTANCE USE IN PREGNANCY (SNUGGLE ME CHECKLISTS)

- Assess for signs and symptoms of acute withdrawal ([Ohio MOMS F.1-F.9](#))
  - Early: agitation, anxiety, muscle aches, increased tearing, insomnia, runny nose, sweating, yawning
  - Late: abdominal cramping, diarrhea, dilated pupils, goose flesh, nausea, vomiting
- Refer immediately to one of the following for treatment and/or stabilization depending on acuity:
  - Emergency Room
  - Obstetric ER/Triage
  - Inpatient treatment center
- Screen for co-morbid psychiatric conditions
  - If positive refer to Behavioral Health, unless this will be provided by treatment program

<ul style="list-style-type: none"> <li>• Screen for co-morbid domestic violence <ul style="list-style-type: none"> <li>◦ If positive refer to domestic violence advocacy service</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Complete a detailed medical, surgical, obstetric, and prenatal history</li> </ul>
<ul style="list-style-type: none"> <li>• Provide a thorough physical examination</li> </ul>
<ul style="list-style-type: none"> <li>• Assess for other immediate psychosocial needs</li> </ul>
<ul style="list-style-type: none"> <li>• Obtain recommended lab testing in addition to routine prenatal labs (<a href="#">NNEPQIN checklist</a>) <ul style="list-style-type: none"> <li>◦ HIV</li> <li>◦ HepBsAg, anti-HBcore, HBsAb <ul style="list-style-type: none"> <li>▪ Consider immunization as indicated</li> </ul> </li> <li>◦ HCV antibody <ul style="list-style-type: none"> <li>▪ If positive draw HCV PCR, LFTs</li> </ul> </li> <li>◦ Serum creatinine</li> <li>◦ Consider gamma-glutamyl transferase (GGT) if active alcohol use suspected</li> <li>◦ Assess risk factors for tuberculosis and screen if indicated</li> <li>◦ Urine toxicology with woman's consent. <ul style="list-style-type: none"> <li>▪ Synthetic opioids (e.g., buprenorphine, fentanyl, oxycodone) may not be detected with standard drug test and may require more specific testing. Consult with individual lab</li> </ul> </li> <li>◦ Baseline EKG before starting methadone</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Perform dating ultrasound upon entry to care</li> </ul>
<ul style="list-style-type: none"> <li>• Determine appropriate level of care and arrange referrals to treatment when indicated and accepted by woman (<a href="#">Wright et al. Figure 1</a>) <ul style="list-style-type: none"> <li>◦ Assess Risk (<a href="#">Ohio MOMS F.1-F.9</a>)</li> <li>◦ Refer for medically supervised inpatient detox if alcohol or benzo dependent</li> <li>◦ If psychiatric or medical instability, refer for appropriate emergency psychiatric or medical care services.</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Give the woman information re. treatment provider/center contact (<a href="#">SAMHSA treatment directory</a>)</li> </ul>
<ul style="list-style-type: none"> <li>• If woman is currently in a treatment program: <ul style="list-style-type: none"> <li>◦ Obtain appropriate CFR42 Part 2 consent to communicate with treatment provider (<a href="#">Legal Action Center sample consents</a>)</li> <li>◦ Coordinate care with mental health/treatment provider or center</li> <li>◦ Women receiving treatment for chronic pain should have drug agreement in place with treatment provider</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Provide a “warm” handoff to treatment provider whenever possible</li> </ul>
<ul style="list-style-type: none"> <li>• Counsel woman on recommended substance use management, risks to pregnancy, fetus, infant and explore treatment options <ul style="list-style-type: none"> <li>◦ Recommended treatment for OUD during pregnancy is MAT with buprenorphine or methadone; explore options and arrange appropriate referrals.</li> <li>◦ Recommended management of alcohol use during pregnancy is complete abstinence; explore options and arrange appropriate referrals as needed.</li> <li>◦ Recommended management of marijuana use during pregnancy is abstinence; explore options.</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Counsel woman regarding risks of tobacco use and offer smoking cessation strategies</li> </ul>
<ul style="list-style-type: none"> <li>• Counsel woman on maternal/fetal/neonatal risks of polysubstance use (<a href="#">SAMHSA Factsheet #6</a>)</li> </ul>
<ul style="list-style-type: none"> <li>• Check the woman's record in state Prescription Monitoring Program</li> </ul>
<ul style="list-style-type: none"> <li>• Be aware of pharmacologic interactions with Buprenorphine/Methadone (<a href="#">McCance-Katz et al. Table 2</a>)</li> </ul>

<ul style="list-style-type: none"> <li>• Discuss Narcan rescue and offer prescription (<a href="#">Narcan toolkit</a>)</li> </ul>
<ul style="list-style-type: none"> <li>• Assess need for bowel regimen for constipation</li> </ul>
<ul style="list-style-type: none"> <li>• Assess need for anti-emetics and antacids for hyperemesis/reflux <ul style="list-style-type: none"> <li>◦ Note: avoid Zofran for women on methadone to avoid prolonged QTc interval</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Consultation and Referral considerations may include, but are not limited to: <ul style="list-style-type: none"> <li>◦ Social Work</li> <li>◦ Case Management</li> <li>◦ Maternal Fetal Medicine if medically complex</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>◦ Cardiology with prior history of pericarditis</li> <li>◦ Infectious Disease if HIV positive</li> <li>◦ Infectious Disease or Gastroenterology if HCV/HVB</li> <li>◦ Dental</li> <li>◦ Dietary</li> </ul>
<ul style="list-style-type: none"> <li>• Schedule short interval follow up for prenatal care</li> </ul>
<b>FOLLOW-UP CARE</b>
<ul style="list-style-type: none"> <li>• Reassess and treat for opioid side effects</li> </ul>
<ul style="list-style-type: none"> <li>• Assess for changes in psychosocial and medical needs</li> </ul>
<ul style="list-style-type: none"> <li>• Ask about cravings, on-prescribed drug and alcohol use at every visit</li> </ul>
<ul style="list-style-type: none"> <li>• Provide continued tobacco cessation counseling and treatment for patient who smokes</li> </ul>
<ul style="list-style-type: none"> <li>• Periodically review PDMP for patient prescription history</li> </ul>
<ul style="list-style-type: none"> <li>• Repeat urine toxicology with consent when indicated</li> </ul>
<ul style="list-style-type: none"> <li>• More specific tests may need to be ordered to identify methadone, buprenorphine, fentanyl, other synthetics or alcohol metabolites. Consult individual lab for guidance.</li> </ul>
<ul style="list-style-type: none"> <li>• Document treatment coordination</li> </ul>
<b>SECOND AND THIRD TRIMESTER CARE</b>
<ul style="list-style-type: none"> <li>• Schedule and/or provide second trimester anatomy scan</li> </ul>
<ul style="list-style-type: none"> <li>• Schedule and/or provide third trimester growth scan <ul style="list-style-type: none"> <li>◦ Monitor growth with serial assessments as indicated</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Antenatal testing only if clinically indicated; e.g., IUGR. (<a href="#">Reddy et al, Box 1</a>) <ul style="list-style-type: none"> <li>◦ If antenatal testing performed, reduce false positive NST and/or BPP by performing at least 4-6 hours after last treatment dose</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Repeat HIV, HCV, RPR, GC/CT in third trimester <ul style="list-style-type: none"> <li>◦ Repeat HBsAg if initial testing negative</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Verify and update MAT medication/dose/status with treatment provider/center prior to birth <ul style="list-style-type: none"> <li>• Advise woman to bring buprenorphine to hospital admission for safe storage and dose verification</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Discuss pain management options for labor and birth and assist woman in development of plan <ul style="list-style-type: none"> <li>◦ Consider Anesthesiology consult for the woman with high anxiety, difficult IV access, or other co- existing medical issues pertinent to anesthesia</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Educate woman and support persons importance maternal participation in newborn care/safety, NAS/NOWS, breastfeeding <ul style="list-style-type: none"> <li>◦ Maternal participation in newborn care (<a href="#">Mommies Toolkit</a>) <ul style="list-style-type: none"> <li>▪ Options for Rooming in</li> <li>▪ Maternal participation in Eat, Sleep, Console (<a href="#">ESC tool</a>)</li> <li>▪ Encourage skin-to-skin and breastfeeding (<a href="#">SAMHSA factsheet #11</a>)</li> </ul> </li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Provide Patient/family education to include: <ul style="list-style-type: none"> <li>◦ Hospital policies (<a href="#">SAMHSA Factsheet #7</a>)</li> </ul> </li> </ul>

<ul style="list-style-type: none"> <li>▪ NAS/NOWS assessment/management/length of stay</li> <li>▪ Breastfeeding</li> <li>▪ Maternal/newborn toxicology and reporting requirements</li> <li>• Signs and symptoms of potential pregnancy complications <ul style="list-style-type: none"> <li>▪ Preterm labor</li> <li>▪ Preterm premature rupture of membranes</li> <li>○ Importance of prenatal care</li> <li>○ Plan for fetal surveillance</li> <li>○ NAS/NOWS assessment/management/length of stay</li> <li>○ Maternal/newborn toxicology and reporting</li> <li>○ Parenting classes</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Consider prenatal consult appointment with pediatrician/neonatologist at delivering institution</li> </ul>
<ul style="list-style-type: none"> <li>• If delivering hospital is unable to care for infant with NAS/NOWS, discuss antenatal transfer of care versus neonatal transfer after delivery if treatment necessary</li> </ul>
<ul style="list-style-type: none"> <li>• Provide contraceptive counseling (<a href="#">SAMHSA Factsheet #7</a>) <ul style="list-style-type: none"> <li>○ If tubal ligation desired, sign federally required consent for Medicaid patients</li> <li>○ Offer post-placental IUD insertion or implant prior to discharge, if available at institution.</li> </ul> </li> </ul>
<b>GENERAL CONSIDERATIONS OF METHADONE MAT IN PREGNANCY</b>
<ul style="list-style-type: none"> <li>• For women on methadone MAT prior to pregnancy, continue current dosing. <ul style="list-style-type: none"> <li>○ May need increased dose in 3<sup>rd</sup> trimester to increase plasma volume.</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Patient/family education (<a href="#">MAT in pregnancy patient education</a>) <ul style="list-style-type: none"> <li>○ Risk and benefits of methadone treatment in pregnancy</li> <li>○ Daily visit requirement at treatment center</li> <li>○ Insurance coverage and/or cost</li> <li>○ Incidence of NAS 50-66%</li> <li>○ Possible effects of newborn head circumference and white matter tracts</li> <li>○ Conflicting long-term studies on outcomes in children exposed in utero</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Initiation of methadone: <ul style="list-style-type: none"> <li>○ Start at 10-20 mg and titrate to eliminate withdrawal symptoms without producing intoxication.</li> </ul> </li> </ul>
<b>GENERAL CONSIDERATIONS OF BUPRENORPHINE MAT IN PREGNANCY</b>
<i>IF ON SUBOXONE PRIOR TO PREGNANCY, CAN CONSIDER CONTINUING SUBOXONE DURING PREGNANCY</i>
<ul style="list-style-type: none"> <li>• In order to maintain plasma concentrations above 1ng/mL to prevent withdrawal symptoms, consider frequent dosing (3-4 times per day) (Caritis, S.N. et al)</li> </ul>
<ul style="list-style-type: none"> <li>• Patient/family education <ul style="list-style-type: none"> <li>○ Risk and benefits of buprenorphine treatment in pregnancy</li> <li>○ Insurance coverage and/or cost</li> <li>○ Higher dropout rate than methadone (33% v. 18%) (MOTHER trial)</li> <li>○ Higher relapse rate</li> <li>○ Limited providers with prescription training and authority</li> <li>○ Use with caution with antiretrovirals, antiseizure, dexamethasone, and SSRI medications</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Initiation of buprenorphine: <ul style="list-style-type: none"> <li>○ Note: Little data on appropriate way to initiate dosing during pregnancy</li> <li>○ Must be in moderate withdrawal</li> <li>○ Must be at least 12 hours since last dose of short-acting opioid</li> <li>○ Start with 2-4 mg and titrate for relief of withdrawal symptoms</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Consider possible “graduation” to monthly prescription as indicated</li> </ul>

## INPATIENT OBSTETRIC CARE

### IF INITIAL CONTACT IS IN OBSTETRIC ED/TRIAGE OR L&D

- Refer to above “Upon entry into care and identification of substance use in pregnancy”
- [Ohio Moms OB.5-OB.8](#)
- [NNEPQIN checklist](#)
- Initiate clinical pathway for acute opiate withdrawal or elective induction to MAT
  - ASAM buprenorphine course
    - [ASAM Induction Protocol](#)
    - [ASAM Sample Inpatient Nursing Protocol](#)
  - [Miami Valley Protocol example](#)
- Consider acute withdrawal in the differential diagnosis of woman with intractable, nausea, vomiting, or abdominal pain
- Assess for signs and symptoms of placental abruption

### ADMISSION FOR LABOR AND BIRTH

- When possible, confirm MAT medication and dose with addiction provider
  - Note: Inpatient provider may legally prescribe buprenorphine and methadone to maintain the woman’s treatment dose during hospitalization
- Continue buprenorphine/methadone at usual dosing ([SAMHSA Factsheet #8](#))
  - Consider dividing total daily dose into every 6-8 hour dosing for maximal analgesic effects ([ACOG Committee Opinion 711](#))
- Prescribe nicotine replacement as indicated
- Labs
  - Routine labs for labor and birth
  - Repeat HIV/Hepatitis screening if not repeated in third trimester
  - Urine drug test with consent
- Notify pediatric provider of admission for delivery and determine need for neonatal team at birth
- Consults
  - Neonatology consult if not previously done
  - Social work/Care management
  - Anesthesiology
  - Lactation
  - If illicit substance use first disclosed at time of birth, consider consultation with addiction specialist or phone consultation with addiction specialist/center, or MFM.
- Offer immediate postpartum long-acting contraception as provided by facility ([ACOG Committee Opinion #670](#))
- Involve the woman, social work, and pediatrics/neonatology to establish a [Plan of Safe Care](#). ([ACOG District II Slides 31-32](#))

### PERIPARTUM PAIN MANAGEMENT (OHIO MOMS PAIN MANAGEMENT PROTOCOL)

- General Considerations: ([Zhou Pain Management Presentation](#))
  - Maintenance medication does not treat pain
  - Women using MAT or with history of long term opioid exposure may require higher and more frequent dosing of narcotic medications for intrapartum and postpartum pain
    - Opioid dependent women have increased sensitivity to painful stimuli (hyperalgesia)
    - Opioids dependent women experience tolerance to opioid treatment for analgesia
    - Higher doses of full opioid agonists will be required to displace buprenorphine and provide analgesia

- Pharmacologic interactions
  - Avoid partial agonist/antagonists in treating pain (i.e., nalbuphine or butorphanol)

- Neuraxial analgesia is preferred for cesarean birth or other procedures
  - If general anesthesia is necessary, be aware of increased risk of airway compromise or drug interactions with concomitant use of stimulants

#### INTRAPARTUM (EXECUTIVE SUMMARY ON OPIOID USE IN PREGNANCY BOX 2)

- Educate L&D and postpartum staff on opioid pharmacology and appropriate pain control

- Provide continuous labor support during active labor
  - 1:1 staffing
  - Consider Doula services if available

- Avoid fetal scalp electrodes in women with HIV or HCV

- Recommend early labor neuraxial anesthesia with continuous dosing to provide pain relief for labor and birth
  - Epidural analgesia using opioids (e.g. fentanyl) in usual labor doses may not be effective in opioid dependent patients.
  - May be necessary to use higher doses of local anesthetics or nonopioid adjuvants such as clonidine
  - If neuraxial anesthesia is not feasible or available, consider the following:
    - Nitrous oxide
    - Short acting opioids
    - *Do not use nalbuphine or butorphanol for analgesia or pruritis as these can precipitate withdrawal*
      - *If withdrawal inadvertently precipitated, withdrawal symptoms can be reversed with full agonists or for those in treatment with buprenorphine a 2-4 mg dose (confirm with current ASAM buprenorphine recommendations/ course slides)*

#### POSTPARTUM CARE (REDDY ET AL)

- Vaginal birth pain management
  - Consider scheduled doses of NSAIDs and acetaminophen rather than prn dosing
    - Avoid acetaminophen with evidence of liver impairment

- Cesarean birth pain management may include the following:
  - Intrathecal or epidural opioids for postpartum pain control
    - May not be fully effective requiring other options
      - Higher concentrations of local anesthetics or non-opioid adjuvants (e.g., clonidine) in epidural solutions
      - Consider PCA for additional coverage if needed but use PCA by demand only and patient monitored carefully for respiratory depression
  - Intraoperative ketorolac when appropriate
  - Scheduled Nonsteroidal anti-inflammatory drugs and acetaminophen
    - Avoid acetaminophen with evidence of liver impairment
  - Alternative pain management includes gabapentin, transversus abdominis plane (TAP) blocks, and IV Tylenol but further data needed

- When opioids used for complicated vaginal or cesarean birth:
  - Monitor closely for over sedation.
    - If somnolent, decrease pain medication dose or consult the addiction treatment provider to adjust dose of MAT
  - Provide close follow-up
  - Prescribe limited quantities
  - Taper rapidly transitioning for non-opioid options
  - Consider avoiding triggering opioids with “high likeability” (e.g., oxycodone) and instead use oral morphine or hydrocodone.

## POSTPARTUM SUPPORT

- If the woman desires to breast feed, provide lactation consultation and breast feeding support ([SAMHSA Factsheet #11](#))
- Provide patient and family education to include:
  - Caring for NAS babies ([Stronger Together video](#)) (*NNEPQIN strongly urges patient education on the Eat, Sleep, Console Model, contact NNEPQIN for more information*)
  - Signs and symptoms of newborn withdrawal
  - Comfort care measures
  - Maternal care needs
  - Signs and symptoms of postpartum depression
  - When to notify a provider (obstetric and newborn)
- If on methadone, monitor for increased somnolence and contact treatment provider if dose decrease appears necessary.

## DISCHARGE PLANNING ([SAMHSA FACTSHEET #15](#))

- Avoid postpartum discontinuation of treatment due to increased relapse rates for SUD after delivery (*NNEPQIN strongly urges the prescription of naloxone at discharge, please see the Opioids section of NNEPQIN toolkit*)
- Coordinate hospital discharge with addiction treatment provider/center and release planned so treatment can continue after discharge without interruption
- Provide contraception counseling and determine contraception plan
  - Offer option to receive postpartum LARC if not already provided
- Develop Plan of Safe Care
  - Engage woman, care coordination, and pediatric/neonatal team to define plan of safe care.
- Determine discharge pain management plan
  - Maximize NSAIDs and nonpharmacologic measures
  - If opioids are required at discharge, prescribe only the quantity likely to be used
- Ensure that plan for postpartum MAT is in place
- Schedule for more frequent postpartum visits with first postpartum visit within 1-2 weeks.
- Safe storage of medications

## POSTPARTUM CARE (OUTPATIENT)

### CLOSE POSTPARTUM FOLLOW-UP WITH FREQUENT VISITS

- Rescreen and brief intervention for return to substance use ([SAMHSA Factsheet #16](#))
- Provide postpartum depression screening
- Monitor for relapse
- Screen for intimate partner violence at 6 weeks and whenever indicated
- Provide smoking cessation reinforcement or continued cessation counseling as indicated.
- Consider providing support services for longer than the traditional 6-week postpartum period
- Assess resource needs at each visit and coordinate with case worker/social service providers
- Assist the woman in scheduling appointments for infectious disease management as indicated
- Facilitate transition for recovery-friendly primary care provider if not previously established
- If breast feeding, provide support
- Provide contraception and counsel on birth spacing if immediate postpartum LARC not used

### 1.1.3 CHECKLIST CHART TEMPLATE

The following checklist was developed by the NNEPQIN Perinatal SUD learning collaborative as a clinician prompt/handoff tool for the ambulatory setting.

ELEMENT	DATE	COMMENTS
Federal consent to share information with treatment provider		
HIV status		
HBsAg, HBcAb, HBsAb		
Hepatitis C antibody		
HCV viral load and genotype <i>(if indicated)</i>		
Hepatic Function Panel		
Serum Creatinine		
Institutional drug testing policy reviewed		
Plan of Safe Care introduced		
Behavioral Health		
Needs assessment / Care Management referral		
Risks of non-prescribed drugs and alcohol discussed		
Marijuana counseling		
Tobacco counseling/treatment		
Narcan discussed /offered		
Offer Hepatitis A or A/B vaccine		
<b>THIRD TRIMESTER</b>		
Repeat HIV, HBsAg, HCVAb, GC/CT		
Ultrasound (growth/fluid)		
Urine toxicology with confirmation, (consent required)		
Ethyl glucuronide/ethyl sulfate (alcohol metabolites)		
<b>THIRD TRIMESTER EDUCATION</b>		
Review Plan of Safe Care		
Review institutional drug testing policy		
NAS/newborn care		
Breastfeeding		
Pain management		
Family Planning		
Pediatrician identified		
Repeat Hepatitis A or A/B vaccine		
<b>OTHER</b>		

### 1.1.4 FACILITATING ACCESS TO NALOXONE AND SAMPLE PRESCRIPTION

Naloxone is a short acting opioid antagonist which is used to reverse life-threatening central respiratory depression caused by opioid poisoning. Specifically, naloxone is used in opioid overdoses to counteract life-threatening depression of the central nervous systems, reversing associated respiratory depression, Intranasal Naloxone is easy to administer intranasally, and can be used legally by bystanders or healthcare providers. Patients who are at risk of overdose, or whose family or community members are at risk, should have access to and carry Naloxone for the reversal of opioid overdose.

#### Provider Materials:

General information about Naloxone: <http://www.getnaloxonenow.org/>

Health Professionals Toolkit for expanding access to Naloxone- available from the Substance Abuse and Mental Health Services Administration (SAMHSA):  
<https://store.samhsa.gov/sites/default/files/d7/priv/sma18-4742.pdf>

#### Sample Naloxone prescription:

Patient Name:	_____
Address:	_____ _____
Rx	Naloxone Nasal Spray 4 mg/1mL # 2
	Administer x1 intranasally
	Repeat in alternate nostril if no response
Do Not Refill _____	(Signature) _____
Refill 2 Times	D.E.A. Number _____
Date _____	Print Last Name _____

**The Providers' Clinical Support System** is a national training and mentoring project for the education of medical professionals about opioid use disorders and pharmacotherapies to address them, developed in "Through a variety of trainings and a clinical mentoring program, PCSS's mission is to increase healthcare providers' knowledge and skills in the prevention, identification, and treatment of substance use disorders with a focus on opioid use disorders." (<https://pcssnow.org/>)

Resources and trainings are free of charge, and available through the PCSS website  
<https://pcssnow.org/education-training/>

#### How to use Naloxone

- How to use a Naloxone overdose kit- short video from Maine General Medical Center:  
<https://www.youtube.com/watch?v=NLo25AQNyeM&feature=youtu.be>
- Frequently asked questions about opioid addiction and naloxone  
<https://harmreduction.org/issues/overdose-prevention/overview/overdose-basics/understanding-naloxone/>
- What to do in the event of an overdose (in English and Spanish)  
[https://www.healthvermont.gov/sites/default/files/documents/pdf/RESP\\_Narcan\\_HowToGiveBrochure2016.pdf](https://www.healthvermont.gov/sites/default/files/documents/pdf/RESP_Narcan_HowToGiveBrochure2016.pdf)

#### State supported access to Naloxone in New Hampshire

- General information about Naloxone in NH, including access:  
<https://thedoortway.nh.gov/avoid-overdose>
- NH Pharmacies with standing orders in place for Naloxone:  
<https://thedoortway.nh.gov/pharmacies>

#### State supported access to Naloxone in Vermont

Access to Naloxone in VT:

- <http://www.healthvermont.gov/response/alcohol-drugs/narcan-naloxone-overdose-rescue>
- <http://healthvermont.gov/adap/treatment/naloxone/#pilots>

### **1.1.5 NEONATAL ABSTINENCE SYNDROME**

Women with opioid use disorders, whether receiving medication assisted treatment with methadone or buprenorphine, or using illicitly, should receive prenatal education about neonatal abstinence syndrome in preparation for birth and newborn care.

#### **Key points**

- Neonatal Abstinence Syndrome (NAS), also known as Neonatal Opioid Withdrawal Syndrome (NOWS), refers to a cluster of symptoms due to neonatal withdrawal after chronic prenatal exposure to opioids, whether prescribed or non-prescribed.
- NAS symptoms mirror symptoms experienced by adults in withdrawal: neurologic symptoms including anxiety/irritability, and seizures; rhinorrhea/sneezing; gastrointestinal symptoms.
- More severe NAS symptoms are associated with polysubstance use and/or the use of illicit opioids.
- Buprenorphine is associated with similar rates but later onset, shorter duration, and less severe NAS symptoms than methadone in most studies (Jones, Kaltenbach, Heil, et al, 2010).
- There appears to be no significant difference in NAS symptoms for infants exposed to buprenorphine monoproduct compared to buprenorphine-naloxone (Jumah, Edwards, Balfour- Boehm, et al, 2016; Debelak, Morrone, O’Grady, et al, 2013) although research is limited.
- There is no clear association between methadone or buprenorphine dose and severity of NAS symptoms (Jones, Kaltenbach, Heil, et al, 2010; Jones, Deppen, Hudak, et al 2014).
- With appropriate treatment, NAS is a time-limited condition. Research about long term neurodevelopmental effects is ongoing, but results so far are reassuring (Kocherlakota, 2014).
- Nonpharmacologic care is the first line of treatment for NAS, and includes maximizing skin-to-skin contact, rooming-in with mother, a quiet environment, and breastfeeding unless contraindicated (Kocherlakota, 2014; Patrick, Schumacher, Horbar, et al 2016).
- Pharmacologic treatment is required if symptoms escalate and cause functional difficulty for the infant (see discussion of Eating, Sleeping, and Consoling Care Tool, below). Morphine is the most commonly used medication, although some programs use methadone, and the use of buprenorphine is being investigated (Kocherlakota, 2014; Kraft, Adeniyi-Jones, Chervoneva et al, 2017).
- Breastfeeding is beneficial unless contraindicated by maternal drug use or HTLV or HIV positive status (Jones, Deppen, Hudak, et al 2014).
- Tobacco use during pregnancy and subsequent nicotine withdrawal is linked to greater intensity and earlier onset of NAS symptoms. (Choo, Huestis, Schroeder, et al 2004)

#### ***Other medication linked to neonatal symptoms***

Other classes of medications are also linked to transient discontinuation syndromes in newborns after prenatal exposure. These include sedative-hypnotics (ex: barbiturates), anxiolytics (ex: benzodiazepines), anticonvulsants (ex: gabapentin), selective serotonin reuptake inhibitors (ex: fluoxetine, sertraline), and selective norepinephrine reuptake inhibitors (ex: venlafaxine). These medications do not cause the same neonatal abstinence symptoms seen following prenatal opioid exposure, but when they are used in combination with opioids during pregnancy, NAS symptoms can be prolonged or more intense (Seligman, Salva, Hayes, et al 2008) (Kaltenbach, Holbrook, Coyle, et al 2012) (Desai, Huybrechts, Hernandez-Diaz, et al 2015). Typically these medications are associated with central nervous symptoms such as jitteriness, increased tone, and fussiness, but not gastrointestinal or metabolic symptoms.

However, experts caution not to discontinue medications such as antidepressants which are essential to maintaining women's mental health (MGH Center for Women's Mental Health <https://womensmentalhealth.org/specialty-clinics/psychiatric-disorders-during-pregnancy/>)

### ***Assessing and Treating Neonatal Abstinence Syndrome***

Symptoms of NAS usually start within 1-2 days after birth, but onset can be delayed for 4-5 days in the case of exposure to long acting opioids such as buprenorphine. Since the 1970s, assessment of the need for pharmacologic treatment for NAS has relied on the Finnegan Scoring System, named for one of its developers, Dr. Loretta Finnegan (Finnegan, 1975; Kocherlakota, 2014). This 21 item scoring system focuses on the three physiologic systems most impacted by withdrawal in newborns, the central and autonomic nervous systems, and the gastrointestinal system. The Finnegan Scoring System is used to guide decisions by pediatric providers regarding need for pharmacologic treatment of NAS. This scoring system remains the most commonly used internationally.

More recently, researchers at Yale-New Haven Children's Hospital, Boston Medical Center, and Children's Hospital at Dartmouth-Hitchcock have developed an alternative scoring system and care approach (the ESC Care Tool) which focuses specifically on three essential functions for newborns: the ability to eat, sleep, and console (Grossman, et al, 2017) and ensuring maximization of non-pharmacologic care first (e.g., rooming-in (Holmes et al Pediatrics, MacMillan et al (MacMillan, et al, 2018) and parental presence (Howard et al, 2017) prior to considering pharmacologic treatment.

The ESC Care Tool was designed to help care for opioid-exposed babies in a more baby-friendly and more specific manner. Eating, sleeping and consoling are the things that are most important to a baby functioning as a baby, and the scoring method focuses on these as main determinants of the baby's need for pharmacotherapy. Definitions are provided for when to consider that a baby's difficulties with eating, sleeping, or consoling are due to opioid withdrawal versus related to other factors instead.

Although a baby will likely still show other signs of withdrawal such as jitteriness, increased tone, sneezing, yawning, and loose stools, the baby is not started on a medicine unless she is having significant problems eating, sleeping, or consoling, and only after all possible non-pharmacologic care measures are optimized first. Rarely, more serious difficulties such as seizures or apnea would necessitate treatment for opioid withdrawal, but other more common etiologies (e.g., infection) should be considered and managed appropriately as per routine standard care.

The ESC Care Tool also encourages staff to provide parents with education about ways they can help their baby do best with opioid withdrawal by encouraging rooming-in, parental presence, skin-to-skin contact, holding by a caregiver or cuddler, swaddling, breastfeeding and feeding the baby when she is hungry and until she is content, providing a quiet room, and limiting visitors if the baby is having difficulties with withdrawal.

The 3 centers mentioned have all noticed significant improvements in care related to NAS including decreased need for pharmacologic treatment, decreased length of stay, and lower hospital costs when using this ESC care method. Additionally, significant reductions in proportion of infants pharmacologically treated and hospital length of stay have also been demonstrated in 2 Northern New England regional improvement collaborations (manuscripts in preparation). Most importantly, this care approach helps mothers and their families learn best ways to care for their own baby, helping them for their transition home. *Please see Additional References section for literature.*

### 1.1.6 MEDICATION ASSISTED TREATMENT FOR OPIOID USE DISORDER POCKET GUIDE

From the SAMHSA Website: This guide is for physicians using medication-assisted treatment for patients with opioid use disorder. It discusses various types of approved medications, screening and assessment tools, and best practices for patient care.



<https://store.samhsa.gov/product/Medication-Assisted-Treatment-of-Opioid-Use-Disorder-Pocket-Guide/SMA16-4892PG>

## 1.2 Patient Materials

### 1.2.1 SAMPLE LETTER #1 TO PATIENT ABOUT NAS

Dear Parent(s),

Congratulations on your pregnancy and/or the birth of your new baby! As you may know, your new baby may experience signs of withdrawal because of the medicines or drugs that you are taking. Our team at the [hospital x] is committed to providing you and your baby with the best care possible. The information in this letter will help you learn how to best care for your baby after birth.

When a baby shows symptoms of withdrawal from an opiate medicine, like methadone or buprenorphine, it is called Neonatal Abstinence Syndrome (NAS). Symptoms of NAS usually start within 1 to 2 days of a baby's birth, but can sometimes take 4 to 5 days. Some babies will need medicine to treat the symptoms of withdrawal. However, most babies can get through the withdrawal with their parent's touch, holding, and care as their only treatment.

Babies do best when their parents are close by to provide a feeling of comfort and safety. Babies also do best when they are cared for in a calm, quiet space without lots of noises or people around. When you care for your baby in your own room, it is called "rooming in." When babies "room in" with their parents, they are able to eat and sleep better. They are also easier to console or calm down. Babies are much less likely to need medicine to treat their withdrawal if their parent is close by. If a baby does need medicine, they will likely need less medicine and be able to go home faster if their parent is there taking care of them all of the time. You are your baby's best treatment for NAS!

We will take the following steps to make sure your baby is as healthy as he or she can be:

1. After birth, your baby will stay with you in the Birthing Unit (or hospitals can inset their own detail) if he or she is born at 35 weeks or more and does not require intensive care for any reason.
2. Nurses and doctors will check your baby for symptoms of NAS after feedings every few hours.
4. We will monitor your baby in the hospital for at least 4 days. We will let your baby go home when we know that your baby has gone through the peak of withdrawal symptoms.
5. If your baby has problems eating, sleeping, or consoling, we will teach you ways to help your baby through the withdrawal problems such as with skin-to-skin contact and quietly rooming-in together.
6. If there are still problems with eating, sleeping, or consoling despite all comfort care measures, your baby may be moved to the Pediatrics Unit to start medicine unless intensive care is needed for another reason.

7. While on the Pediatrics Unit, you will be able to room in with your baby 24 hours a day. On average, babies being treated with medicine need to stay in the hospital for one to two weeks. However, it sometimes takes longer. It is important that you room in with your baby this whole time. Once your baby is off medicine and showing no symptoms of NAS for at least a day, your baby is ready to go home!

During your baby's time in the hospital, you will be your baby's primary caregiver. We will be here to help you, but ***your baby will do best if you are the one providing all of his or her care.***

#### **Care for your baby in a calm, quiet room with the lights down low**

- Keep your baby close to you "skin-to-skin" when you are awake and not sleepy.
- Talk to and sing to your baby.
- Gently sway your baby.
- Feed your baby when he/she shows you hunger or feeding cues (licking lips, bringing hands to mouth, opening mouth to something touching lips or cheek) and until content (at least every 3 hours).
- Breastfeed your baby (unless told not to by a provider for medical reasons).
- Wrap ("swaddle") your baby in a thin blanket keeping the top of the blanket away from his or her face.

#### **Be with your baby 24/7**

Babies with NAS do not do as well when they are in bright, loud settings such as at the Nurse's station.

- Stay with your baby in your private room as much as possible. If you need to leave the unit for some reason (such as for an appointment or a walk) and someone else cannot stay with your baby, please let your nurse know so we can make a plan ahead of time. We will work to find a "cuddler" to help hold your baby in your own room if you need to be away. The sooner you can tell us about these needs, the better we can work together to help you and your baby.
- Help us watch your baby for symptoms of NAS. Let us know if your baby has any problems with eating, sleeping, or consoling. These are the symptoms that are most important to your baby. You can also keep track of these symptoms, and other symptoms of NAS, in your baby's "Newborn Care Diary."
- We will be nearby to help you if you have any questions or concerns.

#### **Make a plan to stay with your baby for as long as he or she needs to be in the hospital**

It is very important that you are able to stay with your baby the whole time he/she is in the hospital. Your baby will be much less likely to need medicine, or will need medicine for a shorter period of time, if you are here to care for your baby all of the time. Here are a few tips to help prepare you for your baby's hospital stay:

- Bring enough clothes and personal items with you to last for 2 weeks or more.
- Plan to have someone watch your other children and/or pets while you are away.
- Tell your family and your employer that you might need to be in the hospital for a couple of weeks.
- Plan to have a home visiting nurse come to your home and to follow up with your baby's primary care provider the first 2 days after your baby's discharge.

We look forward to working with you to help you and your baby have the best experience possible. If you have any questions about any of the information in this letter, please contact Dr. [name of contact], a social worker, or a nurse manager in the Birthing Pavilion at 603.555.5555.

Thank you and congratulations again!

*The Newborn Care Staff at [insert name of your hospital here]*

## 1.2.2 SAMPLE LETTER #2 TO PATIENT ABOUT NAS

### Neonatal Abstinence Syndrome (NAS): Caring for your Newborn

#### **Congratulations on your pregnancy and/or the birth of your new baby!**

*Our team is committed to providing you and your baby with the best care possible. The information in this pamphlet will help you learn how to best care for your baby after birth.*

#### **What is NAS/NOWS?**

Neonatal Abstinence Syndrome, or NAS, occurs when a baby withdraws from opioids after birth. It is also sometimes called Neonatal Opioid Withdrawal Syndrome (NOWS). Most babies show signs of withdrawal 2 to 3 days after birth, but some may not show signs until day 4 or 5.

*Your baby should stay in the hospital until most of the symptoms of NAS are over.*

#### **What are the most common signs of NAS?**

- Tremors, jitteriness, or shaking of arms and legs
- Tight muscles in arms and legs
- Fussiness or hard to console (calm down)
- Problems eating or sleeping
- Need to suck when not hungry
- Frequent spitting up or vomiting
- Loose or watery stools (poops)
- Trouble losing too much or not gaining enough weight (after day 4)

*Serious symptoms like stopping breathing or seizures are possible but very rare.*

#### **NAS/NOWS Assessments**

We will watch your baby closely for signs of withdrawal every few hours. Let your nurse know when your baby is done feeding as this is a good time to check your baby. You can also help us watch your baby by keeping track of:

- How well your baby eats
- How well your baby sleeps
- How well your baby consoles (calms)
- What kinds of things help your baby console/calm (your presence, skin-to-skin contact, holding, swaddling, sucking, a calm/quiet room, rhythmic movement)
- Very loose or watery stools (poops)

*We will give you a Newborn Care Diary to keep track of all of these things!*

#### **What will my care team do to make sure my baby is healthy?**

During your baby's time in the hospital, you will be your baby's primary caregiver. We will be here to help you, but your baby will do best if you are the one providing his or her care.

- We will monitor your baby in the hospital for **at least** 4 to 5 days.
- If your baby has problems with eating, sleeping, or consoling we will teach you ways to help your baby.
- If there are still problems with eating, sleeping, or consoling after all you and we have done to help your baby, we will talk with you about whether medicine may help your baby.
- Medicine may also be needed if other significant problems are present such as problems with breathing or losing too much weight.

#### **How can I best help my baby?**

- **ROOMING-IN & PARENT/CAREGIVER PRESENCE:** One of the best things you can do for your baby is to keep him/her with you in your own room. This is called "Rooming-in". This

helps you provide a space that is quiet and calm. It also helps you respond quickly to your baby's needs. Your baby will feel safest and most comfortable when close to you. It will also help you feel most comfortable in caring for your baby on your own at home. If you are not able to "room-in" with your baby for any reason, be present as much as possible to help hold, cuddle, feed, and talk to your baby. *Remember, you are your baby's best medicine!*

- **SKIN-TO-SKIN:** Spend as much time "skin-to-skin" with your baby when you are awake. This helps your baby eat and sleep better, and will help calm your baby. It can also help with other symptoms of withdrawal. It also helps your milk supply when breastfeeding and can help your baby grow better.
- **HOLDING/SWADDLING/CUDDLING:** Hold your baby in your arms, either skin-to-skin, in their clothes, or swaddled in a light blanket. Just being close to someone, or "tucked" in a swaddle, helps your baby feel safe and comfortable. This can help your baby sleep better. Ask your nurse to show you how to swaddle your baby safely.
- **FEEDING:** Feed your baby whenever s/he is showing hunger cues and until content, at least every 3 hours. It is best to breastfeed your baby unless you are unable to do so for medical reasons. Do not let your baby go more than one 4 hour stretch between feedings each day until your baby is back to birthweight. If your baby is having feeding problems, we will ask for a feeding specialist to help your baby feed better.
- **SUCKING:** If your baby still wants to suck after a good feeding, offer a clean finger or pacifier to suck on. This can be very comforting for your baby. Always make sure your baby is not hungry and is well fed first!
- **A CALM ROOM & SOOTHING NOISES:** Keep your baby's room/space calm and quiet with the lights down low. Use a quiet voice when talking or singing to your baby, or when softly "shushing" your baby. Try a "white noise" machine or app on your phone. Remember, loud noises and bright lights may upset your baby.
- **RHYTHMIC MOVEMENT:** Use slow, gentle "up and down", rocking, or swaying movements when holding your baby. Pause or stop the movement if your baby becomes upset.
- **EXTRA HELP & SUPPORT:** It is also very important for you to be well rested so you can best take care of your baby. Ask for another parent, friend, or family member to help with your baby. Take as many naps/breaks as possible. Remember, your baby will do best by staying in your own room so having an extra helper is key! Let us know if you need help finding someone to help hold/care for your baby while you rest.
- **LIMITING VISITORS:** Try to have only one or two visitors in your room at a time as more may make your baby fussy or not feed or sleep as well. Encourage your visitors to use quiet voices.
- **UNDISTURBED SLEEP/CLUSTERING CARE/:** Allow your baby to rest/sleep undisturbed between feedings. Ask for your baby's nurse and provider to assess your baby when s/he is awake and has fed first.
- **SAFE SLEEP/FALL PREVENTION:** Always make sure you are wide awake when you are holding your baby. If you feel sleepy, ask for someone else to hold your baby. If you are on your own, call out to ask a staff member to help put your baby in the bassinet or to hold your baby.

#### **What happens if my baby does need medicine to treat NAS?**

- Some babies may need just 1 or 2 doses of medicine while others may need to be treated for 10 to 14 days. Some babies may need even longer. It is very important that you are able to stay with your baby this whole time as you are still the most important treatment for your baby. Please plan ahead in case this happens.
- Plan to have at least one family member or friend here with you to help care for your baby in your room.
- Bring enough clothes and personal items with you to last at least one week.
- Plan to have someone watch your other children and/or pets while you are away.
- Sometimes it is hard to talk to your family about why your baby might need to stay in the hospital. If this is true for you, ask your OB or Pediatric provider to help. We also have a social worker who can help you with this or any other difficult conversations.

### **When can I take my baby home?**

Your baby's care team will help decide when it is safe for your baby to go home. We will need to watch your baby for **at least** 4 to 5 days in the hospital to make sure all of the medicine or drug is out of your baby's body. It is best to have your baby stay in the hospital until most of the symptoms of NAS are over.

Your baby is ready to go home when he or she:

- Is feeding and sleeping well.
- Is easy to console (calm down).
- Has not lost too much or is gaining weight.
- Is able to maintain a healthy temperature, heart rate, and breathing.
- Has received the hepatitis B vaccine and all newborn screening is done and normal.
- No longer needs medicine, if it was started.
- Has an appointment made with a home visiting nurse and primary care provider (PCP) for the first few days after discharge. These visits are needed to help watch your baby's weight and NAS symptoms.
- Has a referral made to Early Intervention Services to help monitor your baby's development.
- Has a plan of Safe/Supportive Care completed with referrals made to community supports and services. You will receive a copy of this Plan at the time of your baby's discharge.

*For CHaD: We look forward to working with you to help you and your baby have the best care possible. If you have any questions about any of the information in this pamphlet, please contact Dr. Bonny Whalen, a social worker or a nurse in the Birthing Pavilion at 603.650.7281.*

*For NNEPQIN/other hospitals: Original content developed by Dr. Bonny Whalen and the staff at the Children's Hospital at Dartmouth-Hitchcock. We thank other hospitals using this pamphlet for their additional suggestions for improvement*

### 1.2.3 NAS PAMPHLET-CARING FOR YOUR NEWBORN

Gives patients an overview of NAS and how they can best care for their infant. *Please contact NNEPQIN for a Spanish Language version.*

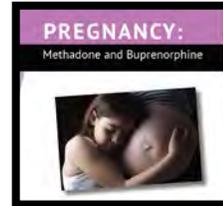


<http://www.nnepqin.org/wp-content/uploads/2018/08/09b.-NNEPQIN-NAS-Pamphlet-REV-03.15.18.pdf>

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### 1.2.4 OPIOID USE AND PREGNANCY

One pager for patients that includes information on safety and dosage around medication assisted treatment.



[http://pcssmat.org/wp-content/uploads/2013/10/WAGBrochure-Opioid-Pregnancy\\_Final.pdf](http://pcssmat.org/wp-content/uploads/2013/10/WAGBrochure-Opioid-Pregnancy_Final.pdf)

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### 1.2.5 OPIOID USE, LABOR, AND CHILDBIRTH

One pager for patients that includes information on preparing for delivery, pain relief and NAS.



[http://pcssmat.org/wp-content/uploads/2013/10/ASAM-WAGBrochure-Opioid-Labor\\_Final.pdf](http://pcssmat.org/wp-content/uploads/2013/10/ASAM-WAGBrochure-Opioid-Labor_Final.pdf)

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### 1.2.6 NEONATAL ABSTINENCE LINK FOR PARENTS FROM MARCH OF DIMES

Provides information for patients about NAS including signs, complications, screening, and treatment.



[http://www.marchofdimes.org/complications/neonatal-abstinence-syndrome-\(nas\).aspx](http://www.marchofdimes.org/complications/neonatal-abstinence-syndrome-(nas).aspx)

## 2. Marijuana

### 1. Cannabis exposure during pregnancy

- The primary psychoactive constituent of cannabis is delta 9-tetrahydrocannabinol ( $\Delta^9$ -THC). Early THC exposure may affect fetal and newborn brain development due to its interaction with the brain's endocannabinoid system (Trezza, et al 2008)
- Children prenatally exposed to cannabis are at increased risk for memory, problem solving, and attention deficits (Goldschmidt, et al 2000; Richardson, et al, 2002)
- It is difficult to attribute causation due to potential impact of environmental factors including maternal nutrition and other substance exposure (Shempf, et al 2008)

Adapted from: <https://www.drugabuse.gov/publications/research-reports/marijuana/can-marijuana-use-during-pregnancy-harm-baby>

In *Clinical Guidance for the Treatment of Pregnant and Parenting Women with Opioid Use Disorder and their Infants*, SAMHSA endorses abstinence from cannabis for either recreational or medicinal purposes during pregnancy and the postpartum period (SAMHSA, 2018).

### 2. Cannabis exposure during breastfeeding

- **Cannabis use while parenting can result in impaired ability to safely care for an infant**
- Although more research is needed, potential risks of marijuana exposure through breastmilk are related to its ready bioavailability and known psychoactive properties
- THC accumulates in breastmilk due to its long half-life (25–57 hours) and its affinity to fat in the mother's milk. THC can be present in human milk up to 8 times the level in the mother's blood and up to one week in some mothers.
- THC is absorbed and metabolized by an infant, rapidly distributed to the infant's brain, and can be stored in an infant's fat tissue for weeks to months
- Breastfeeding is NOT recommended with daily or frequent use of cannabis

The NNEPQIN [Breastfeeding Guidelines for Women with a Substance Use Disorder](#) further addresses breastfeeding with cannabis use.

## 2.1 Provider Materials

### 2.1.1 CURRENT RESEARCH FROM THE NATIONAL INSTITUTE ON DRUG ABUSE

Provides the latest statistics, trends, and research around marijuana and cannabinoid use.



<https://www.drugabuse.gov/drugs-abuse/marijuana>

## 2.2 Patient Materials

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### 2.2.1 RISKS OF MARIJUANA USE DURING PREGNANCY AND BREASTFEEDING

Patient brochure that can be customized with your organization's logo. *Please contact NNEPIN for version in Spanish.*



<http://www.nnepgin.org/wp-content/uploads/2018/08/06a.-Cannabis-brochure MODIFIED-for-website v01.23.18.pdf>

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### 2.2.2 TODAY IS FOR ME

Public health campaign from the NH Charitable Foundation and the Perinatal Substance Exposure Task Force to increase awareness of the dangers of consuming alcohol and marijuana during pregnancy. Includes both print and online resources.



<https://todayisfor.me/pregnant-or-planning/marijuana-facts/>

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### 2.2.3 CANNABIS/MARIJUANA AND PREGNANCY

Provides information for patients about marijuana including types and risks for both pregnant persons and their infants.



<http://www.marchofdimes.org/pregnancy/marijuana.aspx>

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### 3. Alcohol

#### **Alcohol use during pregnancy is the leading cause of preventable birth defects in the United States.**

Despite this, more than 10% of pregnant women ages 18-44 report alcohol use, and at least 3% report binge drinking (defined as more than 3 drinks at one time) during the past month (Substance Abuse and Mental Health Services Administration [SAMHSA], 2013; SAMHSA, 2014). Because alcohol metabolites are not included in most standard urine toxicology tests, alcohol is sometimes also used without being detected by women who are in treatment for other substance use.

Alcohol is a teratogen, and its use during pregnancy is associated with fetal alcohol spectrum disorders (FASD), a term which includes a range of alcohol related effects on the brain, heart, and central nervous system, resulting in characteristic facial features, cardiac anomalies, and impaired growth, through more subtle learning, communication, and behavior problems. The most severe form of FASD, Fetal Alcohol Syndrome (FAS), is associated with higher doses of prenatal alcohol exposure, and includes the presence of congenital anomalies and lifelong neurodevelopmental impairment (Popova, et al 2017). As many as 5% of children in the United States may be affected by FASD (March of Dimes, 2017). The prevalence of the more severe manifestation of prenatal alcohol exposure, FAS, is thought to impact between 30-39 per 10,000 individuals in the United States (Popova, et al, 2017).

There is no safe amount of alcohol use during pregnancy, and no safe period for exposure. However, the effects of alcohol on the fetus are dependent on the timing, frequency and amount of exposure (Association of Reproductive Health Professionals [AHRP], 2015). Therefore, although the goal of prenatal intervention for alcohol use must be complete abstinence, reducing use is preferable to continuing at the same level (ARHP, 2015). Because alcohol use is so harmful to fetal growth and development, screening, early identification and intervention is critical. Women who cannot stop drinking alcohol should be referred for specialty care for substance use.

In [\*Clinical Guidance for the Treatment of Pregnant and Parenting Women with Opioid Use Disorder and their Infants\*](#), SAMHSA endorses parallel management of alcohol withdrawal during pregnancy with that of the non-pregnant patient. Behavioral health interventions and peer support are the most widely used approaches for nonpregnant patients but must be used in conjunction with pharmacologic management of withdrawal when that is indicated (SAMHSA, 2018). Evidence is extremely limited regarding the safety of pharmacologic agents (disulfiram, naltrexone, acamprosate, or gabapentin) for the long term treatment of alcohol use disorder during pregnancy (SAMHSA, 2018).

Many women discontinue alcohol use during pregnancy, but resume postpartum, often with similar harmful use patterns. Therefore, a history of moderate to heavy pre-pregnancy use requires brief intervention and education even when women are not drinking during pregnancy. Alcohol also transfers readily into breastmilk. Levels in breastmilk parallel maternal serum levels, with peak levels at 30-60 minutes, or longer if taken with food (Academy for Breastfeeding Medicine, 2015; LactMed, 2017). Alcohol suppresses milk ejection, and nursing after use can decrease the quantity of milk the infant receives. Although occasional use is not considered harmful, the impact of daily alcohol use, especially at moderate to heavy levels (>1 drink/day) is not well understood, but may impact sleep and early psychomotor development. Based on the pharmacokinetics of alcohol, women who wish to avoid alcohol exposure for their infants should delay breastfeeding until 2-2.5 hours after drinking 1 standard drink, increasing the time before resuming breastfeeding by the same amount for each additional drink (LactMed, 2017).

#### **Screening and Diagnosis of Alcohol Use and Use Disorder**

##### **1. Screening for alcohol use in pregnancy**

All pregnant women should be screened for drug and alcohol use at the first prenatal visit and subsequently (WHO, 2014). Screening should utilize a validated screening instrument (ACOG, 2012) and positive screens followed by brief interventions to determine a woman's use pattern, motivation, and level of need for alcohol treatment services.

All healthcare professionals should feel empowered to respond to disclosure of prenatal drug or alcohol use with concern and assist women to obtain further evaluation and/or treatment. Providers should be sensitive to the prevalence of trauma history, particularly childhood sexual and physical abuse among women with alcohol use disorders.

Screening using a validated screening instrument (examples below), followed by a respectful conversation is the optimal approach to identify harmful alcohol use prior to and during pregnancy. Alcohol use is rarely

detected in standard urine toxicology tests. The AUDIT-C, TWEAK and T-ACE are brief alcohol screening tools validated for use with pregnant women, and the ASSIST, 4Ps Plus and Substance Use Screening Tool are valid screening tools for both alcohol and drug use during pregnancy (WHO, 2014).

## 2. Criteria for a presumed diagnosis of alcohol use disorder

- DSM-V Definition of Alcohol Use Disorder: “A problematic pattern of alcohol use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period.” (American Psychiatric Association, 2013)
- The following checklist can be used to determine whether diagnostic criteria are present for Alcohol Use Disorder:

DSM-V Diagnostic Criteria	Present/date	Comments
1. Alcohol is often taken in larger amounts or over a longer period than was intended.		
2. There is a persistent desire or unsuccessful efforts to cut down or control alcohol use.		
3. A great deal of time is spent in activities necessary to obtain alcohol, use alcohol, or recover from its effects.		
4. Craving, or a strong desire or urge to use alcohol.		
5. Recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school, or home.		
6. Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol.		
7. Important social, occupational, or recreational activities are given up or reduced because of alcohol use.		
8. Recurrent alcohol use in situations in which it is physically hazardous. <i>[For example: this criterion would be fulfilled if a woman regularly operated a motor vehicle while intoxicated]</i>		
9. Continued alcohol use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance. <i>[For example: this criterion would be fulfilled if a woman is aware of the teratogenic effects of alcohol and continues to drink]</i>		
10. Tolerance, as defined by either of the following: a. A need for markedly increased amounts of alcohol to achieve intoxication or desired effect.		

<p>b. A markedly diminished effect with continued use of the same amount.  <i>[Note that a person can have an alcohol use disorder even in the absence of tolerance or withdrawal symptoms]</i></p>		
<p>11. Withdrawal, as manifested by either of the following:  a. The characteristic alcohol withdrawal syndrome.  b. Alcohol (or a closely related substance such as benzodiazepines) is taken to relieve or avoid withdrawal symptoms.</p>		

- The severity of Alcohol Use Disorder can be estimated from this table, using the levels described below:
  - Mild (ICD-10 CM code F10.10): Presence of 2–3 symptoms
  - Moderate (ICD-10 CM code F10.20): Presence of 4–5 symptoms
  - Severe (ICD-10 CM code F10.20): Presence of 6 or more symptoms

### 3. Toxicology tests for alcohol

The standard rapid test for alcohol intoxication is the breathalyzer, which detects the presence of ethanol. Most health care settings do not utilize this technology. Urine can be tested for the presence of two alcohol metabolites, ethyl glucuronide and ethyl sulfate, which can detect alcohol use for several days after its complete elimination from the body (detection window from 30-110 hours, based on quantity of use (Helander, et al, 2009; Wurst, et al, 2003).

Gamma-glutamyl transferase is often used as a screening serum test for heavy alcohol use although it can be elevated with other forms of liver damage ((<https://www.mayomedicallaboratories.com/test-catalog/Clinical+and+Interpretive/8677>)).

### 4. Alcohol Withdrawal

The majority of pregnant women who use alcohol are not physiologically dependent, meaning that they may not experience tolerance or withdrawal. However, physiologic dependence and subsequent withdrawal from alcohol can result from heavy and prolonged alcohol use. Withdrawal symptoms usually occur within several hours to a few days after cessation or significant reduction of alcohol use (American Psychiatric Association,2013). **Unlike opioid withdrawal, alcohol withdrawal can be fatal if untreated.** SAMHSA’s Clinical Guidance for the Treatment of Pregnant and Parenting Women with Opioid Use Disorder and their Infants endorses use of the same management approach for alcohol withdrawal during pregnancy as for the non-pregnant patient (SAMHSA, 2018)

Characteristic symptoms of alcohol withdrawal\* include:

- Autonomic hyperactivity (sweating, pulse < 100 bpm)
- Hand tremor
- Insomnia
- Nausea/vomiting
- Transient visual, tactile, or auditory hallucinations or illusions
- Psychomotor agitation
- Anxiety
- Generalized tonic-clonic seizures
- May include confusion or delirium (Delirium Tremens or “DTs”)

\*symptoms of benzodiazepine withdrawal may be very similar to alcohol withdrawal

The Clinical Institute Withdrawal Assessment for Alcohol Scale (CIWA-Ar) or other similar standardized assessments are used to assess the severity of alcohol withdrawal. Scores <10 on the CIWA do not generally require medication to prevent escalation. If alcohol withdrawal is suspected in a pregnant or postpartum patient, immediate consultation and stabilization is required. The CIWA-Ar can be accessed from: <https://www.merckmanuals.com/medical-calculators/CIWA.htm>

Benzodiazepines can and should be used for the treatment of alcohol withdrawal during pregnancy, as the risks of untreated alcohol withdrawal exceed the risks of short-term use of benzodiazepines.

### **5. Levels of Care for the Treatment of Alcohol Use Disorders (AUD)**

The National Institute for Alcohol Abuse and Alcoholism maintains a treatment navigator to assist patients in finding the right level of treatment near their home communities: <https://alcoholtreatment.niaaa.nih.gov/>

### **Detoxification**

Treatment for alcohol use disorders during pregnancy may require varying levels of intensity and duration. If physiologic dependence and risk for withdrawal is suspected in a pregnant patient, acute hospitalization for detoxification and management through consultation with addiction medicine, psychiatric, and/or maternal-fetal medicine is necessary. For non-pregnant patients, outpatient detoxification may be safe for some patients, while others will need to be admitted. Consultation should be sought with addiction medicine, psychiatric, internal medicine or family medicine to determine appropriate level of care.

### **Medications for AUD**

Three medications are approved by the FDA for the treatment of AUD. **Naltrexone** is an opioid agonist, which also has effectiveness for the treatment of alcohol use disorder **in patients not being treated with opioid agonists**. Naltrexone reduces cravings for alcohol through blockade of opioid receptors, and is available in oral and injectable forms. Although there is little evidence to support the safety of naltrexone during pregnancy for the treatment of AUD, a few studies exist of its use for treating OUD have been reassuring. Based on this, some treatment providers feel that the well-established risk of alcohol use during pregnancy outweighs possible risks of using naltrexone for AUD (Towers CV, Katz E, Weitz B, et al. Use of naltrexone in treating opioid use disorder in pregnancy. *Am J Obstet Gynecol* 2020;222:83.e1-8).

Disulfiram and Acamprosate, both medications for alcohol use disorder, are not recommended during pregnancy or lactation.

### **Residential Services**

Onsite full-time programs for individuals who are unable to achieve their goals in their current environment. Services may involve structured individual, group, and family counseling, education, case management, and psychiatric services. The length of the program is based on the needs of the individual.

### **Intensive outpatient programs (IOP)**

This service may involve structured individual, group, and family counseling, education, case management, and psychiatric services. Services for adults are provided at least nine hours per week and services for adolescents are provided at least six hours per week

### **Mutual Aid Groups**

Alcoholics Anonymous (AA) and other 12-step programs provide peer support for people who wish to decrease or stop alcohol use. Twelve step programs, in combination with treatment by health professionals, are very effective in helping to maintain day to day sobriety. Many people utilize mutual aid groups as their main recovery support for alcohol use disorders.

### **Medication Assisted Treatment for Alcohol Use Disorders**

Medication assisted treatment for alcohol use disorders includes three medications approved by the U.S. Food and Drug Administration: acamprosate, disulfiram, and naltrexone. None of these medications are currently recommended for use in pregnancy; however, there is emerging evidence supporting the safety of naltrexone for the treatment of *opioid* use disorder during pregnancy, which may support its use for perinatal alcohol use in the future (see Jones, et al, 2013). The use of benzodiazepines as “maintenance treatment” for alcohol use disorders is not supported by evidence and is not recommended.

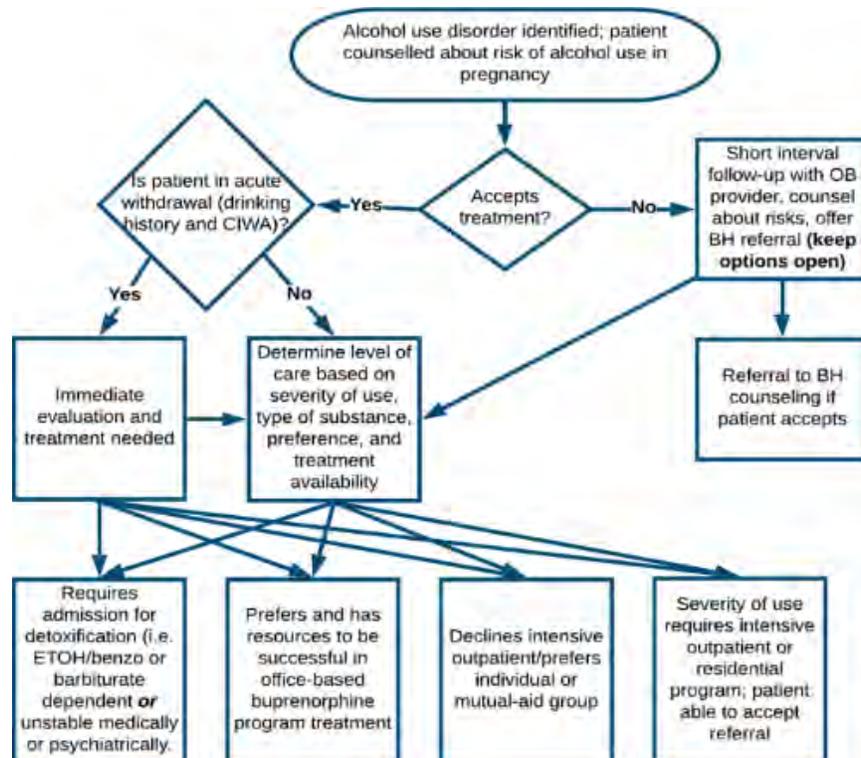
Additional information about levels of treatment for alcohol use disorders may be obtained from:

<https://pubs.niaaa.nih.gov/publications/Treatment/treatment.htm#chapter04>

### 6. Choosing the right level of care

Severity of use, presence or absence of physiologic dependence, availability of treatment, financial resources, health insurance status, conflicting responsibilities and personal preference are all factors which will inform the level of care chosen by a pregnant woman in need of treatment for alcohol use disorder. Most women are highly motivated to seek treatment during pregnancy, and a shared decision making approach is appropriate to facilitate engagement. The following simple algorithm outlines several key steps in this discussion.

Algorithm for discussing levels of care during pregnancy (BH = Behavioral Health Clinician)



## 3.1 Provider Materials

### 3.1.1 ADDRESSING FETAL ALCOHOL SPECTRUM DISORDERS (FASD)

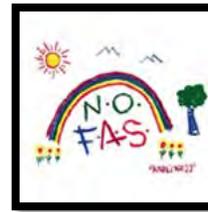
From SAMHSA: “This guide reviews screening tools for alcohol use and interventions for pregnant women and women of childbearing age to prevent fetal alcohol spectrum disorders (FASD). It also outlines methods for identifying people living with FASD and modifying treatment accordingly.”



<https://store.samhsa.gov/product/TIP-58-Addressing-Fetal-Alcohol-Spectrum-Disorders-FASD-/SMA13-4803>

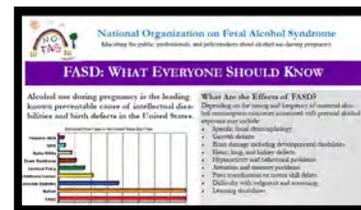
### 3.1.2 NATIONAL ORGANIZATION ON FETAL ALCOHOL SYNDROME

Prevention organization focused on raising awareness as well as supporting families with FAS.



<https://www.nofas.org/>

### 3.1.3 PUBLIC AWARENESS FACT SHEET ON FAS FROM NOFAS



<http://www.nofas.org/wp-content/uploads/2012/10/NOFAS-FASD-What-Everyone-Should-Know-2012.pdf>

### 3.1.4 THE ARC: FETAL ALCOHOL SPECTRUM DISORDERS PREVENTION PROJECT



- [Provider training opportunities on FASD](#)
- [Summary of current knowledge about the impact of alcohol use during pregnancy](#)
- [Association of Reproductive Health Professionals: Fetal Alcohol Spectrum Disorders Consensus Meeting, Meeting Report 2015](#)

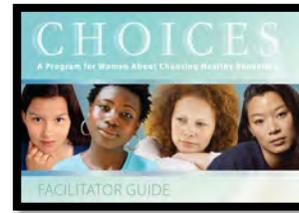
### 3.1.5 SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION: TREATMENT IMPROVEMENT PROTOCOLS



<https://store.samhsa.gov/series/tip-series-treatment-improvement-protocols-tips>

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### 3.1.6 EVIDENCE-BASED “CHOICES” CURRICULUM FOR FASD PREVENTION



<https://www.cdc.gov/ncbddd/fasd/documents/facilitatorguide.pdf>

## 3.2 Patient Materials

### 3.2.1 TODAY IS FOR ME

Public health campaign from the NH Charitable Foundation and the Perinatal Substance Exposure Task Force to increase awareness of the dangers of consuming alcohol and marijuana during pregnancy. Includes both print and online resources.



<https://todayisfor.me/pregnant-or-planning/alcohol-facts/>

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### 3.2.2 CENTERS FOR DISEASE CONTROL INFORMATION AND INFOGRAPHICS

<https://www.cdc.gov/ncbddd/fasd/alcohol-use.html>

<https://www.cdc.gov/vitalsigns/fasd/index.html>

<https://www.cdc.gov/vitalsigns/fasd/infographic.html/#graphic1>

“Think Before You Drink” (Brochure)

<https://www.cdc.gov/ncbddd/fasd/documents/ThinkBeforeYouDrinkbrochure.pdf>

“An Alcohol-Free Pregnancy is the Best Choice for your Baby” [https://www.cdc.gov/ncbddd/fasd/documents/FASDBrochure\\_final.pdf](https://www.cdc.gov/ncbddd/fasd/documents/FASDBrochure_final.pdf)

“Alcohol use in pregnancy” (fact sheet)

[https://www.cdc.gov/ncbddd/fasd/documents/fasd\\_alcoholuse.pdf](https://www.cdc.gov/ncbddd/fasd/documents/fasd_alcoholuse.pdf)

Order free fact sheets for patients from CDC:

<https://www.cdc.gov/ncbddd/fasd/factsheets.html>

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### 3.2.3 MARCH OF DIMES



<https://www.marchofdimes.org/pregnancy/alcohol-during-pregnancy.aspx>

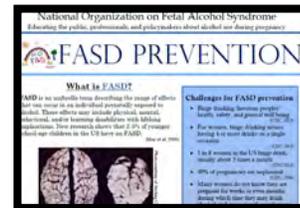


<https://www.marchofdimes.org/complications/fetal-alcohol-spectrum-disorders.aspx>

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### 3.2.4 NATIONAL ORGANIZATION ON FETAL ALCOHOL SYNDROME

Prevention factsheet



<https://www.nofas.org/wp-content/uploads/2014/05/Facts-prevention.pdf>

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### 3.2.5 THE ARC: FETAL ALCOHOL SPECTRUM DISORDERS PREVENTION PROJECT



<http://www.thearc.org/learn-about/fasd>

## 4. Tobacco

- Nicotine readily crosses the placenta, and concentrates in fetal blood, amniotic fluid, and breast milk. Concentrations in the fetus can be as much as 15 percent higher than maternal levels (NIDA, 2012)
- Growth restriction seen in infants of mothers who smoke reflect a dose-dependent relationship—the more the woman smokes during pregnancy, the greater the reduction of infant birth weight (NIDA, 2012)
- Tobacco use is associated with greater impact on birthweight than illicit drug use (Bailey, et al 2012)
- Among women with opioid use disorders, over 90% smoke (Winklbauer, 2008)
- Concurrent tobacco and opioid use is associated with earlier onset and increased severity of neonatal abstinence symptoms
- **Research shows that treating tobacco use does not have a negative impact on recovery** (Reid, et al, 2008)
- **When smoking cessation interventions are provided during addiction treatment, the likelihood of long term recovery is increased by 25%** (Prochaska, 2004)

### ***Strategies for Providers***

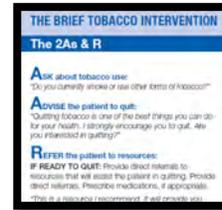
Pregnant women who smoke should be asked about their tobacco use at each prenatal visit and assisted to quit by providers. Women who are considering quitting should be referred to the tobacco helpline in their home state.

A simple approach may be used to address smoking during pregnancy:

- **ASK** every patient at each encounter about tobacco use and document status
- **ASSIST** every tobacco user to quit with a clear, strong personalized message about the benefits of quitting
- **REFER** patients who are ready to quit tobacco within the next 30 days to the appropriate Tobacco Helpline

## 4.1 Provider Materials

### 4.1.1 QUICK REFERENCE FOR TOBACCO COUNSELING FROM CENTERS FOR DISEASE CONTROL



<https://www.cdc.gov/tobacco/campaign/tips/partners/health/materials/twyd-5a-2a-tobacco-intervention-pocket-card.pdf>

### 4.1.2 NEW HAMPSHIRE QUITWORKS

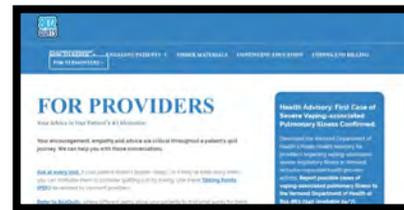
Services provided include phone counseling and nicotine replacement during pregnancy if prescribed



<https://quitworksnh.org/>

### 4.1.3 VERMONT 802QUITS

Includes incentives for each counseling all attended, phone counseling; nicotine replacement with Rx during pregnancy



<http://802quits.org/providers/>

### 4.1.4 STRATEGIES FOR TREATING TOBACCO USE FOR PATIENTS WITH OTHER ADDICTIVE DISORDERS

Mary Brunette, MD, Medical Director, Bureau of Behavioral Health, NH Department of Health & Human Services speaks about common myths about treating tobacco in the context of other addictive disorders



<https://youtu.be/kOqwF4JkXK4>

### 4.1.5 INFORMATION ON PRENATAL TOBACCO RISK

From the Centers for Disease Control (CDC):

[https://www.cdc.gov/tobacco/basic\\_information/health\\_effects/pregnancy/](https://www.cdc.gov/tobacco/basic_information/health_effects/pregnancy/)

From the National Institute on Drug Abuse (NIDA): <https://www.drugabuse.gov/publications/tobacco-nicotine-e-cigarettes/what-are-risks-smoking-during-pregnancy>

From the American College of Nurse Midwives (ACNM): <https://ourmomentoftruth.com/tag/smoking-cessation/>

American College of Obstetricians and Gynecologists Committee Opinion on Tobacco Use and Women's Health: <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2011/09/tobacco-use-and-womens-health>

#### 4.1.6 NO-COST VIRTUAL PROVIDER TRAINING ON BEST PRACTICE FOR SMOKING CESSATION

“Smoking Cessation for Pregnancy and Beyond: A Virtual Clinic” Sponsored by the CDC’s Division of Reproductive Health, this continuing education offering allows providers to learn and practice evidence-based interventions for smoking cessation during and after pregnancy. Included is a free, online training module on e-cigarettes and pregnancy. Additional learning tools include interactive case simulations, mini-lectures from leading experts, interviews with real patients who have quit, and a variety of online office resources. This training is eligible for continuing medical education credit, AMCB CEUs for Nurse-Midwives, and for Maintenance of Certification credit for OB/GYN physicians.

## 4.2 Patient Materials

### 4.2.1 INFORMATION ON PRENATAL TOBACCO RISK

- Impact of tobacco on women and babies: <https://quitnownh.org/pregnancy/>
- Mobile text message support for quitting smoking during pregnancy: <https://women.smokefree.gov/tools-tips-women/text-programs/smokefreemom>
- General mobile text message pregnancy education and support: <https://text4baby.org/>
- Patient fact sheet from American College of Nurse Midwives (ACNM): <http://ourmomentoftruth.com/your-health/smoking-womens-health-learn-the-facts/>
- Smoking during pregnancy fact sheet from March of Dimes: <http://www.marchofdimes.org/pregnancy/smoking-during-pregnancy.aspx>

### 4.2.2 NEW HAMPSHIRE QUITNOW

Services provided include phone counseling and nicotine replacement during pregnancy if prescribed



<https://quitnownh.org/category/i-want-to-quit/>

### 4.2.3 VERMONT 802QUITS

Includes incentives for each counseling all attended, phone counseling; nicotine replacement with Rx during pregnancy



<https://802quits.org/home/i-want-to-quit/free-quit-help-for-you-and-your-baby/>

### 4.2.4 EPA SMOKE-FREE HOMES COMMUNITY ACTION TOOLKIT



[https://www.epa.gov/sites/production/files/2014-08/documents/community\\_action\\_kit.pdf](https://www.epa.gov/sites/production/files/2014-08/documents/community_action_kit.pdf)

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#### 4.2.5 EPA “SMOKE FREE HOME PLEDGE” FOR FAMILIES



[https://www.epa.gov/sites/production/files/2015-09/documents/certificate\\_en.pdf](https://www.epa.gov/sites/production/files/2015-09/documents/certificate_en.pdf)

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#### 4.2.6 PATIENT EDUCATION FACT SHEET FROM AMERICAN COLLEGE OF NURSE MIDWIVES (ACNM)



<https://ourmomentoftruth.com/your-health/smoking-womens-health-learn-the-facts/>

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#### 4.2.7 SMOKING DURING PREGNANCY FACT SHEET FROM MARCH OF DIMES



<http://www.marchofdimes.org/pregnancy/smoking-during-pregnancy.aspx>

## 5. Methamphetamine and Other Stimulant Use

Optimal pregnancy outcomes for women with stimulant use disorders are associated with **abstinence**. Recognizing that complete abstinence is sometimes not attainable, a harm reduction approach based on maximizing information and support for the pregnant woman is essential.

Prenatal stimulant use is not associated with an increased rates of congenital anomalies, but is associated with lower birth weight and small for gestational age infants. The impact of stimulant use on pregnancy outcomes such as abruption, hypertension, and hemorrhage is poorly understood (ACOG, 2019).

### *Maternal impacts*

- Weight loss
- Anxiety
- Tachycardia
- Hypertension
- Permanent cardiac injury with long term use
- Physiologic dependence

### *Neonatal impacts*

- [Low birthweight](#)
- Reduced head circumference
- Small for gestational age

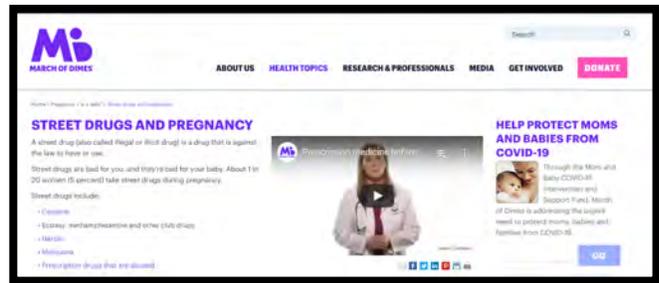
### *Child development*

- Attention deficits
- Problems with memory

In contrast to OUD, evidence-based treatment for stimulant substance use disorders during pregnancy consists primarily of behavioral interventions, especially cognitive behavioral therapy. Heavy use of stimulants can result in severe psychiatric symptoms resembling psychosis, and in physiologic dependence. Withdrawal symptoms include significant irritability, anxiety, and depression, decreasing in severity over several weeks. An individualized plan of care is essential taking into account each patients' drug/alcohol use history, the presence of medical and co- occurring mental health conditions, social needs, family responsibilities, and preferences.

## 5.1 Patient Materials

### 5.1.1 MARCH OF DIMES RESOURCES



Amphetamines and club drug use:

<https://www.marchofdimes.org/pregnancy/street-drugs-and-pregnancy.aspx>

Cocaine use:

<http://www.marchofdimes.org/pregnancy/cocaine.aspx>

### 5.1.2 AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS

Committee Opinion: Methamphetamine Abuse in Women of Reproductive Age



<https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2011/03/methamphetamine-abuse-in-women-of-reproductive-age>

## 6. Counseling Women about Polysubstance Use

Optimal pregnancy outcomes for women with opioid use disorders are associated with **treatment** with methadone or buprenorphine and **abstinence** from other substances, including tobacco, alcohol, marijuana, and other substances of abuse. However, recognizing that complete abstinence is sometimes not attainable, a harm reduction approach based on maximizing information and support for the pregnant woman is essential.

### *Pregnancy risks associated with polysubstance use*

- Placental insufficiency
- [Preterm labor](#)
- [Miscarriage](#)
- [Stillbirth](#)

### *Neonatal impacts*

- [Premature birth](#)
- [Low birthweight](#)
- Reduced head circumference
- Birth defects (alcohol, benzodiazepines)
- Perinatal infection, including Hepatitis B, C, and [HIV](#)
- Increased duration and severity of [Neonatal abstinence syndrome \(NAS/NOWS\)](#)

### *Child development*

- Delayed growth
- [Sudden infant death syndrome \(SIDS\)](#)
- Learning and behavior problems

In contrast to OUD, evidence-based treatment for other substance use disorders during pregnancy consists primarily of behavioral interventions, especially cognitive behavioral therapy. Heavy use of some substances, specifically alcohol or benzodiazepines, can result in physiologic dependence requiring medically managed detoxification (alcohol) or tapering (benzodiazepines). [Factsheet 6 of SAMHSA's Clinical Guidance for the Treatment of Pregnant and Parenting Women with Opioid Use Disorder](#) and their Infants includes a summary table describing recommended treatment approaches for perinatal substance use disorders other than OUD (SAMHSA, 2018, p. 48). An individualized plan of care is essential taking into account each patients' drug/alcohol use history, the presence of medical and co-occurring mental health conditions, social needs, family responsibilities, and preferences.

6.1.1 MARCH OF DIMES



Cocaine:

<http://www.marchofdimes.org/pregnancy/cocaine.aspx>

Street drugs:

<https://www.marchofdimes.org/pregnancy/street-drugs-and-pregnancy.aspx>

Marijuana:

<http://www.marchofdimes.org/pregnancy/marijuana.aspx>

Prescription opioid abuse:

<http://www.marchofdimes.org/pregnancy/prescription-opioids-during-pregnancy.aspx>

Tobacco:

<http://www.marchofdimes.org/pregnancy/smoking-during-pregnancy.aspx>

Alcohol: <http://www.marchofdimes.org/pregnancy/alcohol-during-pregnancy.aspx>

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## 7. Counseling Women about Risks of Synthetic Cathinones (“Bath Salts”)

In Europe, Canada, and the northeastern and central U.S, the use of a group of stimulant-like chemicals commonly known as “bath salts” or “salts” is increasing. These compounds are described generally as synthetic cathinones, but what is sold often varies in chemical makeup due to manufacturing in unregulated labs. The most common chemical constituent of “bath salts” is methylenedioxypropylamphetamine (MDPV), which is difficult to detect through standard testing approaches. These compounds are highly toxic with potentially life-long effects.

### *Key points:*

- Bath salts are available via the internet as a powder which can be swallowed, snorted, or injected
- This group of compounds is highly toxic, impacting the central and autonomic nervous systems, the cardiovascular system, and renal and hepatic function (White et al, 2016; Imam, et al, 2013; Banks, et al, 2014; Winder, et al 2011)
- Immediate symptoms following bath salts ingestion can include
  - Euphoria and sexual excitement
  - Paranoia
  - Confusion
  - Hallucinations and blurred vision
  - Hyperthermia
  - Profuse sweating
  - Muscle twitching or seizure
  - Tachycardia and chest pain
  - Hypertension
  - Decreased peripheral circulation
- Long term effects may include
  - Depression and suicidality
  - Psychosis
  - Kidney damage or failure
  - Skin breakdown at injection site, rash, cellulitis
  - Muscle injury
  - Tolerance and withdrawal
- Risks of bath salts ingestion during pregnancy are unknown but given the physiological effects of the chemical, highly concerning given the autonomic and cardiovascular symptoms which can develop (see Gray and Holland, 2014)
- Treatment is supportive, and patients should be linked to intensive outpatient or residential treatment programs
- Routine toxicology tests are unable to reliably detect cathinones, and tests sent out to specialty laboratories have high false negative rates.

## 7.1 Provider Materials

### 7.1.1 NATIONAL INSTITUTE ON DRUG ABUSE



From the National Institute on Drug Abuse:

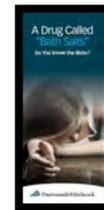
<https://www.drugabuse.gov/publications/drugfacts/synthetic-cathinones-bath-salts>

<https://teens.drugabuse.gov/drug-facts/bath-salts>

## 7.2 Patient Materials

### 7.2.1 A DRUG CALLED "BATH SALTS" BROCHURE (ENGLISH)

Please contact NNEPQIN for Spanish version.



[http://www.nnepqin.org/wp-content/uploads/2018/08/BathSalts\\_bifold4x9\\_press4.pdf](http://www.nnepqin.org/wp-content/uploads/2018/08/BathSalts_bifold4x9_press4.pdf)