

# Opioid Use Disorder Toolkit: Supporting the Public Health Response in Maternal, Child and Adolescent Health

# Purpose

ASTHO, with support from the CDC National Center for Injury Prevention and Control, created this toolkit to train public health and maternal, child, and adolescent health partners on prevention strategies and community resources regarding the effects of substance use disorder on reproductive-aged women, pregnant women, and their infants. From October 2019 through September 2021, the California Department of Public Health piloted the toolkit with staff from the California Home Visiting Program; the state's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); the state's Adolescent Family Life Program; the state's Black Infant Health (BIH) program; the state's Comprehensive Perinatal Services Program; and other local partners who work with people in the perinatal period.

**Please note:** Public health staff are critical in supporting people throughout their pregnancies and beyond and are well-positioned to provide important mental health and substance use screenings and refer patients to community resources. **However, it is not the role of public health staff to diagnose or treat any conditions.** Screening tools and resources are included throughout this toolkit to empower public health staff to speak with people about their mental health and substance use during pregnancy. This toolkit and accompanying trainings aim to increase public health staff self-efficacy in these areas.

# Table of Contents

In	troduction: Understanding the Impact of Opioid Use Disorder	3
	Differences in Substance Use Response and Treatment	3
	Women and Substance Use	4
	Impact of Stress on Substance Use	5
	Adverse Childhood Experiences	6
	Polysubstance Use	8
	Stigma, Policies, and Treatment	9
	Women's Support Network	9
	Medication for Opioid Use Disorder and Breastfeeding	10
	State Profiles in Medication Assisted Treatment Expansion	11
	Neonatal Abstinence Syndrome Prevention and Mitigation in States	12

Screening	16
Mental Health Screenings	17
Trauma-Informed Care	
Legal Responsibilities	19
California	19
Getting a Positive Screen: Providing Resources for Support	20
Naloxone	22
Prevention	22
The Social Determinants of Health	22
Unexpected Events	27
Case Scenarios	
Noelle and Sam: An Initial Visit with a Pregnant Mother	
Ashleigh and Riley: A Young Mother Participating in a Support Group	31
Alyssa and Michelle: A Home Visiting Postpartum Hemoglobin Check with a Field Nurse	33
Appendix A: Screening Tools and Resources	35
Maternal Depression Screening Tools	35
Substance Use Screening Tools	35
Trauma-Informed Care Training Resources	
Appendix B: Local and National Resources	37
California Community Resources	
Making Referrals	40
Academic and Educational Resources	41
Appendix C: Full Text Scenarios	45
Noelle and Sam: An Initial Visit with a Pregnant Mother	45
Ashleigh and Riley: A Young Mother Participating in a Support Group	47
Alyssa and Michelle: A Home Visiting Postpartum Hemoglobin Check with a Field Nurse	49
References	51



# Introduction: Understanding the Impact of Opioid Use Disorder

Opioid Use Disorder (OUD) is defined as "the persistent use of opioids, despite the adverse consequences of its use."<sup>1</sup> The National Institute on Drug Abuse estimates that more than 130 people die from overdosing on opioids every day in the United States.<sup>2</sup> CDC estimates that prescription opioid use costs the United States \$78.5 billion per year.

Opioids alter the chemistry of the brain, which can lead to drug tolerance, meaning that an individual must consume greater amounts of opioids to maintain the same painrelieving effect. When opioids are taken over a long period of time, there is an increased risk of dependence. Individuals who are dependent and stop taking opioids suffer from physical and psychological withdrawal symptoms, which may include muscle cramping, diarrhea, and anxiety.<sup>3</sup>

People misuse opioids for multiple reasons. Approximately 40%-60% of a person's vulnerability to substance misuse can be attributed to genetics, with environmental factors making it more or less likely that a person will develop substance use disorder (SUD).<sup>4</sup> Poor mental health is also associated with increased risk of SUD, as are barriers to accessing mental and behavioral health treatment.<sup>5</sup> Genetic and epigenetic factors (environmental factors that can modify gene expression) can increase an individual's risk of both substance use and mental health problems.<sup>6</sup> Additional factors shown to increase an individual's risk of SUD include partner substance use, medical procedures and follow up care, and chronic pain. Opioids are often

Opioids include pain relievers prescribed by providers (oxycodone), illegal drugs (heroin), and synthetic opioids (fentanyl). Common opioids include:

- Hydrocodone/acetaminophen (Norco)
- Oxycodone (Percocet, Oxycontin)
- Morphine (MS Contin, Kadian, Avinza)
- Codeine/Acetaminophen (Tylenol #3)
- Fentanyl (Duragesic)
- Hydromorphone (Opana)
- Tramadol (Ultram, Ultracet)

Learn more at the California Department of Public Health <u>Opioids</u> and <u>Pregnancy: What You Need to</u> <u>Know</u> and National Institute on Drug Abuse <u>Opioids</u> webpage.

prescribed for longer periods as pain management for chronic pain, and between 21% and 29% of individuals prescribed opioids for chronic pain misuse them.<sup>7</sup> Recent research suggests that prescribing opioids for shorter durations can increase patient welfare. Additionally, simulations show that if 10,000 patients were appropriately prescribed an initial three-day course of opioid treatment instead of an initial seven-day course of opioid treatment, those patients would use opioids for a combined 4,500 fewer months over two years, and employers would save \$3.1 million in that same time.<sup>8</sup>

# Differences in Substance Use Response and Treatment

The way people experience substance use varies, including between women and men. For instance, various studies have shown that there are biological differences in the way men and women metabolize substances. When men and women of equal weight consume the same amount of alcohol, women have a higher blood alcohol concentration.<sup>9,10</sup> Women also feel the pain-relieving effects of opioids more intensely than men.<sup>11</sup> The opioid oxycodone is metabolized differently in women, resulting in a 25% higher concentration compared to men, even when controlling for body weight. <sup>12</sup> Women may be quicker to become dependent on substances because of their higher body fat to water ratio, their liver to body size ratio, fewer stomach enzymes compared to men, and the influence of female hormonal



changes.<sup>13</sup> However, public health staff should be aware that historically, most research on substance use did not include women in clinical trials due in part to the belief that women were more biologically complicated than men.<sup>14</sup>

Studies have also shown that women are at different risks of substance use initiation, and women seek, arrive at, and receive substance use treatment differently than men. For example, women who are victims of domestic or sexual violence are more likely to initiate substance use, and women who experience challenges in their personal lives, such as divorce or loss of child custody, are more likely to engage in substance use.<sup>15</sup> Women progress from first substance use to dependence more quickly than men,<sup>16</sup> and are prescribed opioids at twice the rate as men.<sup>17</sup>

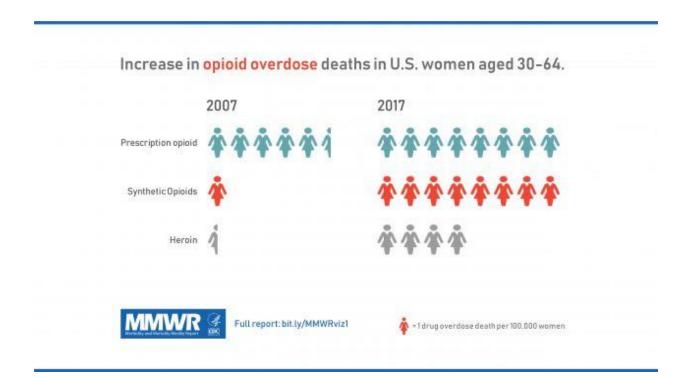
Multiple studies found that fewer women seek treatment for opioid misuse than men<sup>18</sup>, despite similar treatment success rates. Public health staff should be aware that women may be less likely to seek treatment for opioid use disorder than men, further highlighting the importance of open, non-judgmental communication between public health staff and their female clients. Women also tend to present at treatment with more advanced forms of opioid use disorder than men.<sup>19</sup> Recent research suggests that women seeking treatment for opioid use disorder are more likely than men to report psychiatric comorbidity, medical conditions, and are more likely to be unemployed<sup>20</sup>. Women are also less likely than men to receive naloxone in the event of an overdose.<sup>21</sup> These differences in how women experience challenges related to substance use underscores how imperative it is that public health staff view women holistically, consider how the social determinants of health impact their clients, seek gender specific treatments, if available, and screen women using the <u>Integrated 5Ps screening tool</u> and refer positive screens as soon as possible.

# Women and Substance Use

Women's substance use is complex and heavily influenced by social, cultural, socioeconomic, physiological, and psychological, factors. From 1999 to 2015, the death rate for prescription overdoses among women increased 471%, compared to a 218% increase among men.<sup>22</sup> Women also have a higher chance than men of experiencing chronic pain and using higher doses of prescription opioid medication for extended periods of time.<sup>23</sup> Additionally, women with substance use disorders disproportionately suffer from co-occurring depressive and anxiety disorders, and are more likely to rely on substances to manage the negative consequences of these disorders.<sup>24</sup>

As Figure 1 illustrates, between 2007 and 2017, opioid overdose deaths among U.S. women ages 30-64 greatly increased overall, and there was a 72% increase in women dying specifically from synthetic opioid overdoses.





# Figure 1. Increase in opioid overdose deaths in U.S. women aged 30-64

Between 2008 and 2012, one in three reproductive-aged women filled an opioid prescription each year, and 14%-22% of women who were pregnant during those years filled an opioid prescription during pregnancy.<sup>25</sup> Using substances, including opioids and stimulants, during pregnancy can have health impacts on the mother and her fetus. Opioid use during pregnancy is associated with neonatal abstinence syndrome (NAS), a withdrawal syndrome in newborns that has been increasing in prevalence.<sup>26</sup>

Pregnant women who misuse substances are at an increased risk of poverty, mental health disorders, and domestic violence, and may also rely on these substances as a form of self-medication to manage these negative experiences. These risks may jeopardize maternal health and a child's development and can contribute to an intergenerational cycle of trauma.<sup>27</sup> However, when SUD is treated early and effectively, positive health outcomes are more likely. Therefore, it is important to educate pregnant and postpartum women on the benefits of substance use treatment and the types of available treatment services for those with positive SUD screenings to increase the chances of a healthy mother and child.<sup>28</sup>

# Impact of Stress on Substance Use

Emotional and psychological stressors can increase a woman's chances of misusing prescription opioids. Poor mental health status during pregnancy is associated with increased risk of SUD, which can lead to negative effects for infants.<sup>29</sup> Additionally, pregnant women with SUD are more likely to have a history of physical and sexual violence than pregnant women without SUD. Past adverse childhood experiences (ACEs), which include but are not limited to physical or sexual abuse, poverty, parental incarceration, and parental divorce, play a significant role in SUD. Studies have shown that victims of physical and sexual violence have an increased vulnerability to substance use.<sup>30</sup> Sexual trauma combined with post-



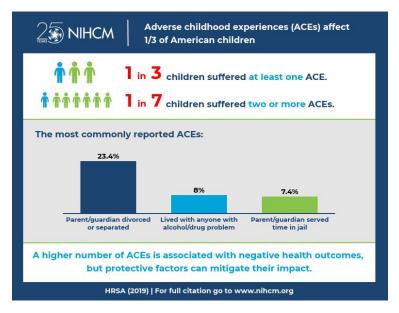
traumatic stress disorder is often found in women who are misusing substances, and women who are misusing opioids often misuse other substances as well.

It is important for public health staff to look holistically at a person's life experiences, and not simply focus on substance use, as integrated treatments for comorbidities, such as mental health and substance use, have been found to be more effective than treating individual disorders with separate treatment plans.<sup>31</sup> In addition, because substance use is associated with ACEs and other social determinants of health, relapse should be considered a normal part SUD treatment. Public health staff who are treating people with OUD or SUD should examine the impact of stress on their clients' lives and be prepared for a potential relapse when clients face external stressors. (See section on Naloxone for more information on relapse). For example, social workers are more likely to help their clients stay in recovery if they keep a low level of emotionality in their own relationships with their clients, as the interaction of emotions with addiction increases the risk for recurrence.<sup>32</sup>

## Adverse Childhood Experiences

### **Understanding Trauma's Impact**

ACEs, defined as traumatic events that occur in childhood, including psychological, physical, or sexual abuse or violence; or living in households with SUD, mental health issues, or instability due to parental separation or imprisonment, can increase the risk for substance use disorder later in life.<sup>33</sup> In 1998, CDC and Kaiser Permanente published a <u>keystone report</u> linking the number of ACEs an individual experiences to risk factors for early death or negative outcomes later in life.<sup>34</sup> The findings of this report were supported over time with continuing research into ACES and health.<sup>35</sup> As seen in Figure 2, ACEs affect one in three children in America:<sup>36</sup>



## Figure 2: Prevalence of Adverse Childhood Experiences in U.S. Children

ACEs have been linked to an increase in risky behaviors that can lead to alcohol and drug use.<sup>37,38, 39</sup> ACEs have also been linked to higher incidences of toxic stress, which influences the pleasure and reward



center of the brain—the part of the brain that is stimulated by opioids and narcotics. Living with someone with substance use problems is the second most reported ACE, which reflects the nationwide trend of increased opioid use discussed earlier.<sup>40</sup> This can lead to a cycle of substance use and trauma that can be difficult to stop without intervention.

Taking a trauma-informed care approach makes it easier for both clients and providers to better understand the impact of trauma and prevent and sustain self-care.<sup>41</sup> Due to the sensitive nature of ACEs, clients may not always be comfortable disclosing them. Public health staff working with people they suspect have lived through an ACE should create safe, trauma-informed environments for their clients to build trust and confidence so that people feel comfortable sharing their thoughts and experiences.

#### **Community Trauma**

Community trauma also impacts family and community resilience. Community trauma can result from continual harsh conditions, such as interpersonal and structural violence, intergenerational poverty, lack of collective efficacy or the ability for community members to come together and produce desired results, social and economic inequalities, and other social factors that hinder families from living healthy lives.<sup>42,43</sup> Caregivers, service providers, and teachers who experience community trauma experience even greater challenges in supporting their community and caring for children.<sup>44</sup> Therefore, it is important to establish protective factors and prevent continued trauma by having health providers embrace a trauma-informed care approach.

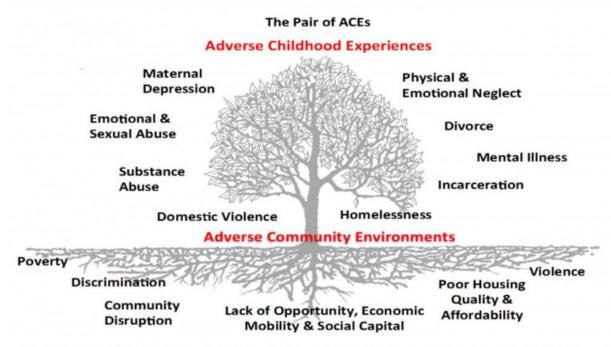
#### **Intergenerational Effects**

Toxic stressors during childhood display trauma's complex intergenerational connectedness, a cycle between parents and children that impacts the community and is impacted by the community.<sup>45</sup> Parents' ACEs have psychological and physical long-term effects that can result in their children's exposure to physiological challenges and unhealthy behaviors.<sup>46</sup> It is important for public health staff to recognize the impact of intergenerational trauma without scaring people who have experienced ACEs or making them feel powerless to change their children's trajectory. Public health staff should stress that patterns of trauma transmission in families can be stopped with appropriate treatment and positive, safe relationships.

The figure below shows the relationship between adverse childhood experiences and adverse community environments. It illustrates the symbiotic relationship between individuals and their communities.



### Figure 3. The Pair of ACEs



Ellis, W., Dietz, W. (2017) A New Framework for Addressing Adverse Childhood and Community Experiences: The Building Community Resilience (BCR) Model. Academic Pediatrics. 17 (2017) pp. S86-S93. DOI information: 10.1016/j.acap.2016.12.011

## Polysubstance Use

A recent study utilizing the 2016 National Survey on Drug Use and Health found that the majority of recent (in the past 30 days) prescription opioid misuse occurred with other substances, including alcohol, tobacco/nicotine, cannabis, or drugs, such as cocaine and methamphetamines.<sup>47</sup> Opioid use occurring simultaneously with other substance use complicates cessation efforts.

OUD during pregnancy increased 5% between 2007 and 2017, which aligns with the overall trend of increased opioid use throughout the country during this timeframe.<sup>48</sup> Factors associated with OUD include mental health status; use of other substances, such as illicit drugs and alcohol; and partner opioid use. The postpartum period can also be a particularly vulnerable time for people with OUD. People in the postpartum period face unique challenges, including the relative lack of specialized and prioritized postpartum treatment resources, postpartum hormonal changes, postpartum depression, and the stigma of having an infant exposed to substances.

Pregnant women with OUD are likely to combine opioids with other drugs or alcohol during pregnancy,<sup>49</sup> which can have short- and long-term effects on health. Specifically, mixing addictive drugs such as methamphetamines, opiates, and cocaine can increase a person's risk for experiencing psychotic behavior, seizures, or overdose death.<sup>50</sup> Infants exposed to multiple substances in the prenatal period are also at risk of developing a variety of physical emotional, and developmental problems.<sup>51</sup> Mixing alcohol or other sedatives with opioids can be especially dangerous because both impact the part of the brain that regulates breathing.<sup>52</sup> For instance, individuals who use cannabis may achieve a temporary feeling of emotional relief of psychological symptoms as they would with alcohol.<sup>53</sup>



When conducting substance use screenings and discussions, public health staff should always ask about multiple drug use. A recent study found that the rate of U.S. people with OUD also report using methamphetamine increased from 19% in 2011 to 34% in 2017.<sup>54</sup> The study noted that methamphetamine may serve as an opioid substitute to "balance out" the suppressant effects of opioids. Using both opioids and methamphetamine puts the health of both parent and child at risk.

For individuals experiencing polydrug use disorders, treatment and recovery will take time because each addiction has its own side effects and healing process. An addiction specialist may be needed to help support the individual and design a comprehensive treatment plan.<sup>55</sup>

# Stigma, Policies, and Treatment

Stigma is the disapproval of or discrimination against a certain group of people, place, or nation. Pregnant women who use licit or illicit substances continually encounter elevated levels of stigma, which may prevent them from receiving appropriate care.<sup>56</sup> Policies in some states require reporting possible substance use and consider their use during pregnancy as child abuse.<sup>57,58</sup> However, punishing pregnant people with SUD is counter to existing evidence regarding the treatment of SUD, fails to address structural and systemic reasons why a person may use substances, and can deter people from seeking prenatal treatment.<sup>59</sup> A recent cross-sectional study found that states that had criminalized substance use during pregnancy had higher rates of NAS in the first year of the laws' enactment.<sup>60</sup>

Because of a lack of education and training, healthcare providers can also play a role in stigmatization. Some doctors who are trained to prescribe medication for addiction may refuse to treat pregnant women with SUD for fear that prescribing medications such as buprenorphine may harm a fetus.<sup>61</sup> Additionally, many women do not access medication for opioid use disorder (MOUD) due to fear of state policies that sanction pregnant women with SUD or OUD, a lack of access to affordable healthcare, a lack of access to postpartum care and treatment, a need for childcare and transportation, and a lack of social support.<sup>62</sup> This underscores the importance of viewing people's lives holistically and attempting to understand underlying social and emotional factors that may lead to substance use.

A harm reduction approach to treating people with SUD may be an effective way to reduce stigma. Harm reduction refers to strategies that "meet people who use substances where they are," and can range from encouraging safer use, to managed use, to abstinence.<sup>63,64,65</sup> Harm reduction principles include a commitment to social justice (that is, equal rights, opportunity and treatment for all), collaborating with networks of people who use substances, and avoiding stigma.<sup>66,67,68</sup>

Although the effects of perinatal substance use need to be addressed, understanding addiction as a chronic disease that can be medically treated rather than criminalizing it based on misinformation and stigma is necessary to providing comprehensive care.<sup>69</sup> Using harm reduction principles and avoiding stigma when supporting people in all stages of pregnancy can lead to higher enrollment in treatment and increased opportunities for better maternal and neonatal outcomes.<sup>70</sup>

# Women's Support Network

A woman's family and community support can have an important impact on her experience with substance use. Women are more likely to start misusing substances when they are involved in intimate relationships, especially when their significant others introduce them to these substances. Additionally,



women are often the caregivers of their families, which is correlated with increased risks of depression, anxiety, and other mental health indicators. Therefore, female caregivers may be at an increased risk of substance use disorder.<sup>71</sup> However, women with SUD who can remain caregivers, and continue to manage the stress of caregiving, are more likely to stay in treatment for longer periods of time.<sup>72</sup>

Medication for Opioid Use Disorder Opioid withdrawal is physically and emotionally stressful and is characterized by an activated sympathetic nervous system with cardiac symptoms, including hypertension and rapid heartbeat. Years of research indicate that methadone maintenance decreases opioid cravings and enables recovery more effectively than acute withdrawal. This is also true for women who are experiencing OUD during pregnancy.<sup>73</sup> MOUD, also known as Medication Assisted Treatment (MAT), during pregnancy has been shown to treat substance use disorder and minimize the risk of fetal withdrawal in utero.<sup>74,75</sup> MOUD includes social and behavioral support in addition to pharmacotherapy with methadone or buprenorphine and is the recommended best practice for people experiencing OUD during pregnancy. MAT is consistent with a goal of harm reduction that supports individuals' choices and does not pressure cessation or abstinence from drug use.<sup>76</sup> Medically supervised withdrawal is not recommended during pregnancy.<sup>77,78</sup> However, for people who refuse MOUD, medically supervised withdrawal can be considered under the care of a physician who is experienced in perinatal addiction treatment.<sup>79,80</sup>

MOUD should be administered under medical supervision using a holistic approach that focuses on the health and well-being of the parent and the developing fetus. MOUD should continue throughout the pregnancy and into the postpartum period. People undergo many changes throughout the course of pregnancy, and their bodies grow exponentially, often requiring higher doses of medicine, especially during the third trimester. For example, progesterone is a steroid hormone that plays an important role in preparing the uterus for pregnancy and maintaining a uterine environment that supports fetal growth once pregnancy is achieved.<sup>81</sup> Progesterone increases throughout pregnancy, and the rate of methadone clearance is increased as progesterone levels are elevated, necessitating higher doses of methadone.<sup>82</sup> People receiving buprenorphine treatment during pregnancy may require modest adjustment in the dosage due to the blood volume increase during pregnancy.<sup>83,84,85</sup>

# Medication for Opioid Use Disorder and Breastfeeding

People who receive MOUD during their pregnancy should be encouraged to breastfeed in the postpartum period, as long as they are not using other illicit substances or are otherwise contraindicated.<sup>86</sup> Methadone and buprenorphine, the two pharmacotherapies recommended in MOUD, are considered to be safe during breastfeeding.<sup>87</sup> Breast milk has been proven to help protect babies from illness; in fact, breastfed babies have lower risks of many chronic diseases, including asthma, obesity, Type 2 diabetes, and leukemia.<sup>88</sup> Additionally, breastfeeding, breast milk, and skin-to-skin contact reduce severity and duration of NAS.<sup>89</sup> Breastfeeding also helps birthing parents heal after childbirth and lower their risk of Type 2 diabetes, ovarian cancer, and certain breast cancers.<sup>90</sup> Breastfeeding necessitates skin-to-skin contact, which helps with bonding between the parent and child. This initial bonding facilitates healthy early parent-infant interaction.<sup>91</sup>



For more on how to talk about breastfeeding, see case scenario "<u>Noelle and</u> <u>Sam: An Initial Visit with a</u> <u>Pregnant Mother</u>"



# State Profiles in Medication Assisted Treatment Expansion

### California

California is increasing its efforts to expand access to treatment, reduce overdose rates, and treat OUD as a chronic disease through the <u>MAT Expansion Project</u>, which is adapted from Vermont's hub and spoke model <u>successes</u>. "Hubs" will support intensive MAT training for staff who specialize in addiction treatment. "Spokes" work with "hubs" to provide continued care for stabilized patients maintaining treatment. California's goal is to increase MAT services by 30% for communities with the highest overdose rates and to expand access to MAT services in urban locations, tribal communities, and underserved areas. Through a comprehensive and warm hand-off approach, the safe and direct transfer of care to an SUD specialist for treatment and recovery support services, California aims to increase access to providers who prescribe buprenorphine and increase buprenorphine-related counselling services.

### Pennsylvania

Pennsylvania has been successful in building a model to expand access to MAT through a multi-pronged approach and focus from the state health official.<sup>92</sup> Pennsylvania's <u>Centers of Excellence</u> (COE) initiative uses an evidence-based approach to address SUD, including OUD. Currently, 45 COE or medical homes in Pennsylvania connect individuals enrolled in Medicaid to SUD care and treatment. Seven COEs specifically target pregnant and postpartum women, but all centers are required to report how many pregnant and postpartum clients have been linked to an obstetrician for continued care.

Pennsylvania's program focuses on treating pregnant and postpartum women with MAT, counseling, behavioral therapy, and case management. COEs focus on team-based care by creating community-based care management teams that provide a spectrum of behavioral health primary care resources. COEs address barriers that prevent women from seeking care, such as stigma, inadequate support systems, lack of transportation or childcare, comorbid psychiatric issues, multiple substance use exposure, and/or fear of legal prosecution. With patient consent, the care team coordinates care and provides 'warm handoffs' to SUD treatment, obstetric and postpartum care, and supportive services, like housing and transportation. Warm handoffs occur when a healthcare provider makes a face-to-face introduction to an SUD specialist, and a direct referral into MAT and other necessary treatment.<sup>93</sup> Pennsylvania also received a \$3 million federal grant to expand MAT services in rural parts of the state.<sup>94</sup> Pennsylvania further prioritized increased access to MAT by eliminating prior authorization for MAT for all health plans that the state regulates, including Medicaid plans.<sup>95</sup>

### Vermont

Between 2012 and 2018, Vermont more than doubled the rate per 10,000 of adults receiving MAT for OUD, from 115 people in treatment to 257, respectively.<sup>96</sup> Significant investments in the "hub and spoke" system has steadily increased the state's capacity to treat OUD. "Hubs" are regional specialized practices that offer methadone and buprenorphine as well as intensive counseling and support services, while "spokes" are medical practices that prescribe buprenorphine, but not methadone.<sup>97</sup> Spokes also provide behavioral health services for patients with OUD. Vermont has had great success in engaging people in MAT through the hub and spoke model. Each year since 2013, more people are receiving MAT in hubs and spokes, with 2.6% of Vermonters aged 18-64 receiving MAT this way in 2018.<sup>98</sup> The hub and



spoke model, along with measuring outcomes and building relationships between traditionally separate governmental agencies in Vermont, is key to the state's success in increasing access to MAT.<sup>99</sup>

# Neonatal Abstinence Syndrome Prevention and Mitigation in States

People who experience OUD during pregnancy or are placed on MOUD may have infants born with neonatal abstinence syndrome (NAS), which causes the infants to experience withdrawal symptoms, including:<sup>100,101</sup>

- Central nervous system excitability, which may present as hyperactivity, irritability, or sleep disturbance.
- Gastrointestinal dysfunction, which may manifest as excessive or uncoordinated sucking reflexes and swallowing that may lead to poor feeding, vomiting, and diarrhea.
- Increased respiratory rate.
- Fever, sweating, nasal stuffiness, and a high-pitched cry.<sup>102</sup>

Between 2004 and 2014, as the opioid epidemic in the United States grew, there was a greater than fivefold increase in the incidence of NAS nationwide.<sup>103</sup> In addition to the benefits of breastfeeding described above, breastfeeding has been shown to delay the onset and reduce the severity of NAS symptoms.<sup>104</sup>

Several states have used innovative approaches to identify and treat infants with NAS while engaging mothers with SUD and supporting the parent-child dyad.

### California

Between 2006 and 2015, there was a two-fold increase in California infants born with NAS. In 2014 alone, 900 infants were born with NAS in California.<sup>105</sup> Figure 4 illustrates the diversity of NAS rates across California. Between 2013 and 2015, Humboldt, Shasta, and Santa Cruz counties had the highest percentage of infants born with NAS, while neighboring Santa Clara, Merced, San Mateo, Los Angeles, and Orange counties had the lowest rates.

The California Maternal Quality Care Collaborative and the California Perinatal Quality Care Collaborative worked jointly with the Health Management Associates on the <u>Mother & Baby Substance</u> <u>Exposure Initiative</u> to decrease NAS severity and hospital stay lengths and increase the number of mothers in long-term opioid recovery.<sup>106</sup> The initiative did this by increasing the use of MAT and opioid prevention, treatment, and recovery activities statewide and Emphasizing care that maintains the mother baby dyad. Between January 2019 to December 2020, 10 counties in California participated in the initiative, including the two most impacted counties, Humboldt and Shasta (see Figure 4).

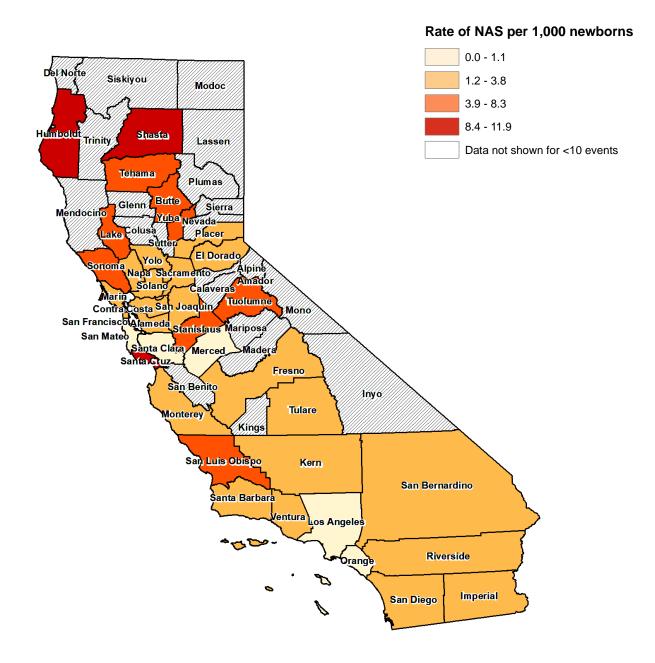
The Mother & Baby Substance Exposure Initiative created a comprehensive <u>toolkit</u> that describes best practices to support and improve care for substance exposed mothers and newborns. The toolkit focuses on the importance of the mother-newborn dyad and provides examples and best practices for providers working in labor and delivery, the nursery/neonatal intensive care unit, and the outpatient setting.



The <u>California Opioid Overdose Surveillance Dashboard</u>, a resource developed through an ongoing collaboration between the California Department of Public Health, Office of Statewide Health Planning and Development, Department of Justice, and the California Health Care Foundation, provides recent data on opioid overdose and NAS incidence in California.



# Figure 4. Rate of Neonatal Abstinence Syndrome Among California Resident Newborns by County: 2013-2015<sup>107</sup>





### Colorado

A collaboration between 20 hospitals in Colorado has led to a decrease in the amount of time infants with NAS stay in the hospital after birth and demonstrated the importance of the relationship between mothers and their newborns. The Colorado Hospital Substance Exposed Newborns Collaborative (CHoSEN) began in 2017 to standardize the use of best practice approaches to identifying and responding to newborns prenatally exposed to substances.<sup>108</sup> CHoSEN is a collaborate that includes the Colorado Substance Exposed Newborns Steering Committee (a subcommittee of the Colorado Attorney General's Substance Abuse Trend and Response Task Force chaired by Illuminate Colorado), the Neonatology Section of University of Colorado School of Medicine's Department of Pediatrics, and the Colorado Perinatal Care Quality Collaborative.

CHoSEN adopted the Eat, Sleep, Console method for determining if a newborn is experiencing opioid withdrawal, which requires providers to monitor newborn behavior instead of relying on drug screens. This method looks at whether the baby is feeding normally (eat), able to sleep for an hour at a time (sleep), and can be calmed within ten minutes of crying (console).<sup>109</sup> CHoSEN also encourages mothers of newborns have NAS to engage in skin-to-skin contact and breastfeed. Recent research from the Yale New Haven Children's Hospital found that the Eat, Sleep, Console approach, which originated in hospitals in New Hampshire (see below), helped to limit pharmacologic treatment in infants exposed to prenatal opioid use.<sup>110</sup> Nurses and doctors at hospitals that are part of the CHoSEN collaborative focus on keeping newborns with their families and enhancing the mother-infant relationship.

## **New Hampshire**

In New Hampshire, educating and empowering mothers and families of infants with NAS was the focus of a 2014-2017 initiative at Children's Hospital at Dartmouth-Hitchcock (CHaD). CHaD implemented a standardized approach to treating newborns at-risk of NAS that included prenatal family education, family involvement in monitoring symptoms, encouraging on-demand breastfeeding, and skin-to-skin contact.<sup>111</sup> This model resulted in lower hospital costs and shorter stays for infants at-risk of NAS, all while family satisfaction improved.<sup>112</sup>

Faculty at CHaD, Yale New Haven Children's Hospital, and Boston Medical Center developed the Eat, Sleep, Console method for assessing infant with NAS, which has shown preliminarily positive results in hospitals in Colorado, Maine, Massachusetts, New Hampshire, and Vermont.

CHaD also partnered with the New Hampshire Department of Health and Human Services (DHHS) on additional activities related to improving the care for infants at risk of NAS, including:

- Participating and advising the governor's Perinatal Substance Exposure Task Force on topics related to opioid-and substance-exposed newborns.
- Collecting and sharing data on the number of opioid-exposed newborns and infants assessed for NAS with DHHS.
- Creating a model template ("plan of safe care") for perinatal healthcare providers to ensure infants are discharged from the hospital to safe home environments.
- Proposing a draft state notification system for all substance-exposed infants, as well as for those requiring a referral to the New Hampshire Division for Children, Youth and Families to develop a safe discharge plan.



- Piloting a comprehensive newborn screening card to help hospital staff accurately identify all infants exposed to opioids in utero.
- Facilitating mother-child bonding during the hospital stay when possible.<sup>113</sup>

# Screening

The American College of Obstetricians and Gynecologists, CDC, and the American Medical Association recommend universal screening for substance use during pregnancy.<sup>114</sup> Clinical postpartum guidelines suggest that "the comprehensive postpartum visit should include a full assessment of physical, social, and psychological well-being, including...mood and emotional well-being."<sup>115</sup> However, fewer than half of women return to their OB-GYN for their six-week-postpartum visit, making it critical that public health programs leverage existing contacts with women during the prenatal and postpartum periods to screen for behavioral health issues.<sup>116</sup>



For more on how to screen pregnant women, see the case scenario "<u>Noelle and</u> <u>Sam: An Initial Visit with a</u> <u>Pregnant Mother</u>."

Universal screening for substance use during pregnancy is recommended by many public health organizations, including CDC

and the American Medical Association. To establish a standardized system of care and avoid biases, public health workers should screen **all** clients (including those who are pregnant or postpartum) for behavioral health issues, regardless of whether or not a client displays possible symptoms of substance misuse. One universal screening approach—screening, brief intervention, and referral to treatment (SBIRT)—has been shown to effectively identify when appropriate intervention is needed.<sup>117</sup> It is important to note that screening is *not* diagnosis, but rather detecting substance use, discovering potential behavioral or mental health issues, and offering support or direct referral to specialists for diagnostic assessment when there is a positive screen.<sup>118</sup> Because public health programs and agencies—including WIC, home visiting programs, and public health partners—have robust referral networks and often have deep roots in communities, they are well-positioned to link women to appropriate care and wraparound community supports.<sup>119</sup>

The Maternal, Infant, and Early Childhood Home Visiting Program and WIC should leverage their contact and relationships with new parents to conduct behavioral health screenings, ensuring that people who are unable to attend their follow-up home visits or WIC appointments are not missing out on this important service. Public health programs may also support people needing behavioral health treatment by connecting them with appropriate treatment options.



Establishing rapport and trust with clients before conducting a screen can help clients relax and may lead to more truthful answers. Depending on the relationship between a client and provider, the provider may need to wait several sessions before administering a screening. (However, this can be difficult for patients whose social determinants of health limit their ability to attend WIC counseling sessions due to transportation or other issues.) Utilizing a trauma-informed approach to discuss substance use and screening can help establish a foundation of trust between the screener and client.

For more on how to establish rapport, see case scenario "<u>Ashleigh and</u> <u>Riley: A Young</u> <u>Mother</u> <u>Participating in a</u> <u>Support Group</u>."

## Mental Health Screenings

Because mental health status is an important factor in substance use, it may be appropriate to screen for mental health conditions in addition to screening for OUD. Maternal depression screening is endorsed by multiple expert panels, including the American Academy of Pediatrics-endorsed Bright Futures Guidelines, the American College of Obstetricians and Gynecologists, and the U.S. Preventive Services Task Force.<sup>120</sup> A variety of mental health screening tools exist for maternal depression, including the <u>Edinburgh Postnatal Depression Scale</u>. The Edinburgh Depression Scale is widely recommended due to its higher sensitivity (59% to 100%) during pregnancy and usefulness in identifying symptoms of both anxiety and depression.<sup>121</sup> This simple, 10-question scale can be completed by the mother herself and does not require special training to administer.



For more on how to screen, see case scenario "<u>Alyssa and</u> <u>Michelle: A Home Visiting</u> <u>Postpartum Hemoglobin Check</u> <u>with a Field Nurse</u>."



# Trauma-Informed Care

According to the Substance Abuse and Mental Health Services Administration (SAMHSA), trauma "occurs as a result of violence, abuse, neglect, loss, disaster, war and other emotionally harmful experiences. Trauma has no boundaries with regard to age, gender, socioeconomic status, race, ethnicity, geography or sexual orientation."<sup>122</sup> Delivering care in a trauma-informed way means considering an individual's traumatic experiences before providing services. The concept of trauma-informed care grew as a response to the research on ACEs (described in more detail above).<sup>123</sup> A non-judgmental, holistic, empathetic approach to planning for and providing services is key to trauma-informed care.

Nationwide, the WIC program covers 15 million low-income parents (and their children up to age five) who may not be able to meet their family's nutritional needs on their own.<sup>124</sup> WIC, home visiting, and other public health staff working with children and families would benefit from considering a holistic view of each family's situation. Considering the living conditions, relationships, and family members' past traumatic experiences are critical to determining what services and resources would be most beneficial.<sup>125, 126</sup> When considering a trauma-informed care approach, SAMHSA suggests employing the six principles of safety; trustworthiness and transparency; peer support; collaboration and mutuality; empowerment, voice, and choice; and cultural, historical, and gender issues.

Six Principles of the Trauma-Informed Approach <sup>127</sup>		
Safety	Staff and clients should feel physically and emotionally safe; privacy is respected.	
Trustworthiness and	An organization's practices and decision-making should be apparent to	
Transparency	staff, clients, and their family members to create a foundation of trust. Providers should recognize boundaries and stay consistent in their practice.	
Peer SupportProviders should create access to trauma survivors who can support a c and their family's recovery.		
<b>Collaboration and</b> Providers should understand that everyone has a role in creati		
Mutuality	informed approach through sharing power and decision-making.	
Empowerment, Voice,	Through shared strengths, lessons learned, and experiences, an	
and Choice	organization can promote healing from trauma among individuals and	
	communities. Recognizing that clients may have previously experienced	
	coercive treatment and lack of autonomy, the organization and staff are	
	encouraged to employ shared decision-making, validate clients, and be implementers of recovery.	
Cultural, Historical, An organization avoids cultural stereotypes and biases, understan		
and Gender Issues historical trauma, supports traditional cultural connections, gives a		
	gender responsive care, and creates policies and practices that address	
	clients' racial, ethnic, and cultural needs.	

## Moving Toward a Trauma-Informed Approach<sup>128</sup>

SAMHSA also suggests applying the following four assumptions from its Concept of Trauma and Guidance for a Trauma-Informed Approach 2014:

1. **Realize**. Understand what trauma is, how it affects individuals and the people around them, and how people can recover from trauma.



- 2. Recognize. Employ screenings and learn the signs and indicators of trauma.
- 3. **Respond**. Learn to be aware of your approach toward others through your use of language and behavior. Creating a safe environment is key to building trust, fairness, and openness.
- 4. **Resist Re-Traumatization**. Avoid re-traumatizing clients by recognizing that organizational systems and practices can trigger negative memories and emotions.

# Legal Responsibilities

It is critical for public health programs that screen for behavioral health issues to have a clear protocol in place for connecting people with treatment as needed. Public health programs also need to be aware of the laws in their states related to substance use during pregnancy. Since the early 1970s, half the states have adopted perinatal substance use reporting laws.<sup>129</sup> Twenty-five states and the District of Columbia require health providers to report perinatal substance use.<sup>130</sup> Nineteen jurisdictions require the reporting of infants to child protective services, six require the reporting of pregnant people with substance use, seven require that both infants and pregnant people be reported, and four only require reporting when substance use results in harm to the child.<sup>131</sup> Thirteen states require a toxicology screen before reporting and 17 require additional evidence beyond a toxicology screen.<sup>132</sup> Eight states (Indiana, Iowa, Kentucky, Louisiana, Minnesota, North Dakota, Rhode Island, and South Dakota) require substance use testing when drug use is suspected and over half of states do not automatically consider substance use during pregnancy to be child abuse.<sup>133</sup>

The Child Abuse Prevention and Treatment Act (CAPTA), the key federal legislation that guides state policy regarding child abuse and neglect, originally enacted in 1974 and amended several times through 2019, does not require states to report to all substance-exposed newborns to child protective services (CPS) or involve CPS in plans of safe care, nor does it mandate that states report CAPTA-based notifications to CPS as allegations of suspected neglect or abuse against the parent.<sup>134,135</sup> Instead, states are required to have policies and procedures to "notify" CPS of infants identified as being "affected by" substance abuse or withdrawal symptoms resulting from prenatal drug exposure, or a Fetal Alcohol Spectrum Disorder and arrange for plans of safe care that anticipate the needs of the whole family (not just the infant) but not to trigger punitive services or family separation which can cause more harm.<sup>136</sup> While CAPTA does not require states to rely on existing child protective services in plans of safe care, it is up to individual states to determine what agencies, including CPS are responsible for developing, implementing, and monitoring the plans of safe care.<sup>137</sup>

Although confidentiality is critical to the patient-staff relationship, it is important to recognize when staff are legally required to release information to the state or county law enforcement, social services, and public health. When state or local law requires reporting certain information (e.g., known or suspected child abuse or perinatal substance use), WIC is given permission to release this information. However, if no local or state law is in place for reporting confidential information despite federal policies that may encourage reporting, WIC has no obligation to disclose the information.

### California

In California, there are no specific laws classifying substance use during pregnancy as child abuse.<sup>138</sup> California law does specify that "a positive toxicology screen at the time of the delivery of an infant is



not in and of itself a sufficient basis for reporting child abuse or neglect. However, any indication of maternal substance abuse shall lead to an assessment of the needs of the mother and child."<sup>139</sup>

Each California county is to have a protocol for assessing the needs of a substance exposed child to identify services for the family, determine the risk to the child, and collect information for planning purposes.<sup>140</sup> It is important for public health staff in this state to be familiar with their county's protocol for managing substance exposed pregnancies. California is part of a group of 25 states and the District of Columbia that require health professionals to report diagnosed or suspected substance use during pregnancy.<sup>141</sup> However, under California law, if the sole risk factor to the child is based on the parent's inability to provide care due to the parent's substance use, public health staff should make a report only to the county welfare or probation office, not to law enforcement.<sup>142</sup> California law also states that pregnant people should have priority access to county substance use treatment and recovery programs, and it directs funding to establish substance use treatment programs for pregnant people.<sup>143, 144</sup>

Note: For more information about legal and confidential concerns related to a pregnant or postpartum person's substance use, see Appendix 8 (p. 113) of WIC's <u>Substance Use Prevention: Screening</u>, <u>Education, and Referral Resource Guide for Local WIC Agencies</u>. If you have questions about if or when reporting is required, please contact your agency's legal counsel.

## Getting a Positive Screen: Providing Resources for Support

A positive screen for opioid use or misuse necessitates connecting an individual to community resources as soon as possible. HRSA's <u>Supporting Families Impacted by Opioid Use and Neonatal Abstinence</u> <u>Syndrome</u> resource emphasizes that both clinical and community supports are needed to offer a comprehensive continuum of recovery.

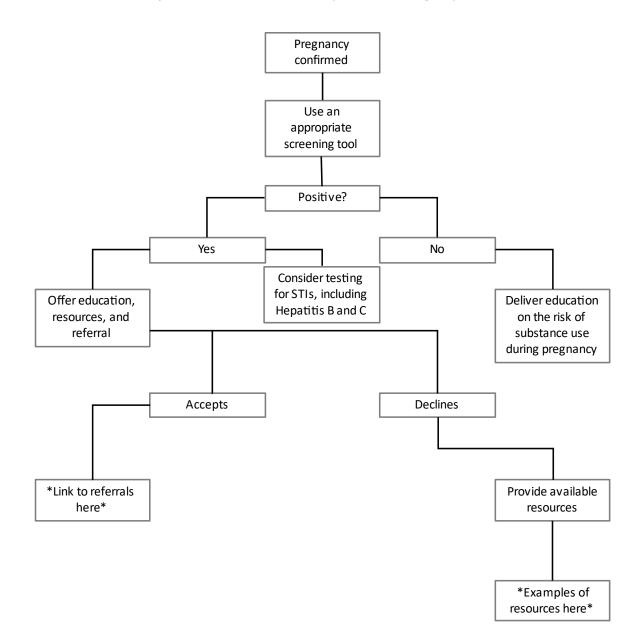
A comprehensive approach to treating SUD is vital for parent and child. Abruptly discontinuing all substances can be dangerous because unmonitored withdrawal can put stress on a person's body and harm the fetus. A harm reduction lens can help frame how public health staff can think about getting a positive screen. It is important for public health staff to try to appreciate where people are coming from and work to connect them to community systems that support their health in a holistic way. For example, MOUD during pregnancy can improve health outcomes, and additional services, such as childcare, parenting classes, and job training, can help increase the chances of the parent's continued treatment and support a parent and child's overall well-being.<sup>145</sup>

The Ventura County Health Care Agency in California created the perinatal decision tree below, which illustrates the process for screening pregnant people for substance use and referring as needed. Other agencies and counties can adapt this chart for their own use.



#### Figure 5. Decision Tree for Screening Pregnant People for Substance Use and Making Referrals

This decision tree was adapted from the <u>Ventura County Health Care Agency</u> Perinatal Decision Tree.





# Naloxone

OUD is a chronic illness, and relapses are expected. Therefore, public health staff working with people experiencing OUD during and after pregnancy should be ready to treat relapses. When people recovering from OUD relapse, they will often use the same dose they used prior to beginning treatment. However, their tolerance may be lower than when they were misusing opioids, which can trigger an overdose. Opioids affect the part of the brain that regulates breathing, so opioid overdoses can also occur when individuals take high doses, regardless of whether the individuals were in recovery.<sup>146</sup> There are three primary symptoms that indicate an opioid overdose:

- 1. Pinpoint pupils
- 2. Unconsciousness
- 3. Respiratory depression<sup>147</sup>



For more on how to screen, see related case scenario "<u>Alyssa and Michelle: A</u> <u>Home Visiting Postpartum</u> <u>Hemoglobin Check with a</u> Field Nurse."

Naloxone is a medication known as an opioid antagonist that, if given in time, can counter the effects of an opioid overdose. Anyone who may witness an overdose should have naloxone readily available and be prepared to administer it, this includes people who use drugs, their friends, and families. Naloxone is sold under the brand name Narcan or Evzio. Naloxone is not addictive, and only works if the recipient has opioids in his or her system.

Nationwide, physicians or licensed healthcare professionals can prescribe naloxone to people who are in MOUD, and pregnant people can safely be given naloxone if they experience an overdose. All 50 states have enacted laws or created standing orders that allow individuals who use opioids—and those who have close contact with these individuals—to receive naloxone from certain pharmacies and community organizations without a prescription.<sup>148,149</sup> Home Visiting Program and WIC should connect with community organizations to provide naloxone. Family members of people who are on MOUD and have been prescribed naloxone should always keep it available to use during a suspected overdose.

# Prevention

Preventing or reducing the incidence of OUD in pregnancy and the incidence of NAS necessitates a multi-sectoral strategy that includes federal, state, and local governments; state and county health departments; health plans and healthcare providers; and home visitors. In order to effectively prevent OUD in pregnancy, staff need to understand the societal and individual factors that influence substance use.

# The Social Determinants of Health

Years of research confirms that the social determinants of health—the conditions in the places where we live, work, learn, and play—influence our physical and mental health. In many states, increasing rates of social inequities, homelessness, mental illness, and depression have aligned with increasing rates of OUD, addiction, and overdose deaths, especially among those who are most marginalized.<sup>150</sup>



#### **Income and Education**

Two social determinants of health—low income level and low educational attainment—have been associated with substance use, and extensive research demonstrates that stressful life events occur at a greater frequency in neighborhoods with lower education and income levels.<sup>151</sup> Neighborhood disadvantage has a significant effect on the likelihood to use drugs in one's adulthood, as substance use may be a way to cope with these social stressors and psychological distress.<sup>152</sup> Research indicates that using drugs or alcohol at a young age has been associated with lower educational attainment.<sup>153,154</sup>

In a study observing educational achievement among community populations of African Americans in an impoverished urban neighborhood, educational attainment was identified as a key risk factor for substance use disorders.<sup>155</sup> Concurrently, children from low income families typically have parents without any college education.<sup>156</sup> Lower levels of education are typically associated with lower-paying jobs with fewer opportunities for advancement.<sup>157</sup> Substance use that impacts educational attainment can also impact earnings, and can have profoundly negative effects on individuals, their families, and their communities.

### **Community Resources**

Counties with the lowest levels of social capital have the highest overdose rates.<sup>158</sup> When multiple people in a community struggle with OUD, community resources such as the police force and emergency medical staff can be stretched too thin, and the entire community may suffer. For example, first responders, including law enforcement officials and paramedics face repeated exposure to the effects of the opioid crisis in communities, which put them at risk for post-traumatic stress disorder and compassion fatigue or burnout.<sup>159</sup> The rise in opioid overdose-related deaths can also overburden medical examiners and coroners and strain staffing and storage capacity. Additionally, high rates of OUD can have significant community economic impacts, such as high unemployment, which reduces communities' tax bases, and labor shortages that pose challenges for employers and slow economic growth.<sup>160</sup> Businesses in these affected communities may close or streamline their operations, which necessitates reducing their labor force, impacting the income level of the entire community. Because lower income level has been shown to be associated with an increased risk of OUD and OUD is a risk for declining income, this example illustrates the negative, multigenerational cycle that OUD can have on individuals and communities.

### **Strategies for Public Health Staff**

It is critical that public health program staff think about the various aspects of each client's life and how it may impact his or her health. One strategy that staff may employ is to practice empathy and envision what a day in the life of their client looks like. Below are just a few of the types of questions that illustrate how important it is to consider a holistic view of a person's social determinants of health before recommending resources or services:

• When this person opens their eyes, what do they see? What type of home do they live in? Who else lives in the home with this person? What are their relationships like with those who live in their home?



For more on these strategies, see related case scenario "<u>Noelle and Sam:</u> <u>An Initial Visit with a</u> <u>Pregnant Mother</u>."

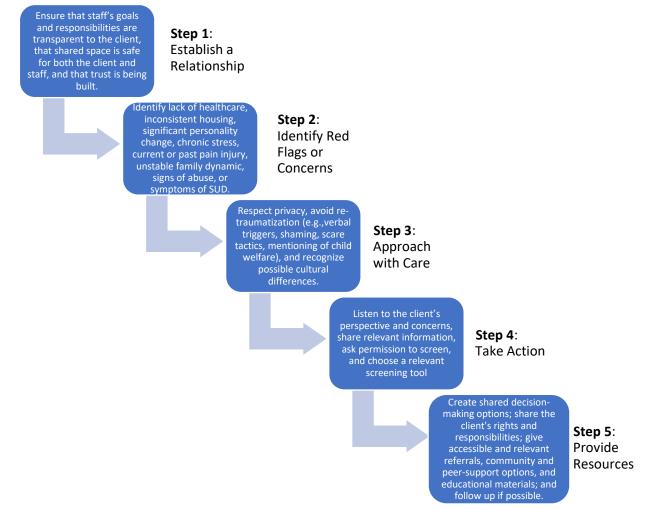
• What type of food is available in the home? Is there often food available in the home? Will this person be distracted by hunger during a visit?



- What type of neighborhood is the home in? What types of relationships does this person have outside the home?
- Does this person have access to a personal vehicle or public transportation? Would this person be able to get to a support group across town?
- What type of job does this person have? Would this person be able to take time off work to go to a support group or doctor visit?
- What type of community does the person live in? If exercise is recommended, does this person feel safe walking in their neighborhood?
- What types of opportunities are available to this person in the future?

The diagram below shows how public health workers can integrate social determinants of health considerations into support for people in the perinatal period.

## Figure 6. Five Steps Public Health Workers Can Take to Support Perinatal People





### **Community-Wide Recommendations**

ASTHO released the comprehensive public health framework <u>Preventing Opioid Misuse and Overdose in</u> <u>the States and Territories</u>, which recognizes the critical role of public health leaders and partners in carrying out a comprehensive, cross-sector response to the opioid crisis. Among other prevention strategies, the framework recommends:

- Supporting pharmacies and medical providers in deterring prescription opioid misuse by integrating state prescription drug monitoring program databases into existing pharmacy and Health IT software systems.
- Working with community leaders to promote school, community, and university partnerships that support evidence-based prevention systems with middle school youth and their families.
- Working with pain clinics to promote evidence-based mindfulness programs found to reduce risk for opioid misuse, like <u>The Mindfulness-Oriented Recovery Enhancement</u> <u>program</u>.

A comprehensive approach toward perinatal people and OUD increases a person's ability to ensure the health of themself and infant. This involves investing in the following community-level program and services, which must work together to create a comfortable environment for people to seek treatment resources.<sup>161,162</sup>

- Social and community support (e.g., family, friends, programs that help build parenting skills and communication skills, and peer recovery programs).
- Access to services (e.g., transportation, childcare, and health insurance services).
- Treatment (e.g., MOUD for the parent and pharmaceutical and non-pharmaceutical options for the infant).
- Quality healthcare (e.g., obstetric, gynecological, and mental healthcare—psychiatric care, counseling, screening, and nutritional guidance).

As illustrated in Figure 7, each of these elements is equally necessary to enable pregnant people with OUD to receive necessary care and achieve recovery. If one piece is missing, the full circle of a healthy parent and child cannot be completed, which can create barriers to a successful recovery process.









# **Unexpected Events**

When working with clients, public health practitioners must be mindful of local, national, and global current events, as different economic, social, cultural, or environmental events can be triggers to unhealthy coping mechanisms like substance use. Examples of these current events include global pandemics such as COVID-19, celebrity deaths, social movements regarding structural and systemic racism, polarizing political events, and natural disasters. In addition, clients can be experiencing personal financial trouble, familial stressors, or the loss of a loved one, which may increase impulsive responding and self-medication.

These events can be traumatic and have major implications for individuals, communities, and public health practitioners. Individuals may feel depressed, helpless, unsafe or wary of institutions, and, for individuals in recovery for substance use, can lead to relapse. Pandemics and natural disasters can leave individuals in vulnerable circumstances without as much community or therapeutic support. For example, across the United States in 2020, people have been asked to remain physically distant from others to prevent the spread of COVID-19. As a result, public health practitioners have been managing the bureaucratic and logistical hurdles of seeing clients via telephonic or telemedicine techniques. Clients without access to the digital communication devices needed for these appointments may miss appointments altogether, and when they are able to attend virtual appointments, public health practitioners may be adjusting to this new method of communication.

Public health practitioners can help mitigate the effect of these situations by talking with clients about their social determinants of health during their first meetings so that, if an unexpected pandemic, tragedy, or disaster presents itself, staff are aware of the clients' individual circumstances and how to reach their clients. To better understand their clients' situations, public health practitioners may ask themselves:

- How can I reach my client? Do they have access to a telephone or computer?
- Is my client in a safe living situation?
- Does my client have enough food to eat?
- Is my client at risk of a relapse?
- Does my client have a support network readily available to them?

Public health practitioners should also be aware of resources they can access to help clients navigate these unexpected circumstances. (See document appendices for more information.) Finally, when pandemics, tragedies, or disasters strike, public health staff should be sure to take care of themselves and their families, as well as those of their clients.



# **Case Scenarios**



Noelle and Sam: An Initial Visit with a Pregnant Mother

This activity is meant to introduce the group to the case scenarios. This scenario works best if the group reads it aloud and then discusses the examples of what to say and think about. This will help set the group up for success in role playing for the next two scenarios.

Noelle is a public health program staff member who has been working at a county health department for five years. Noelle's next client is Sam, a 27-year-old woman who is six months pregnant with her first child.

Pregnant people who are coming in for their first appointment with public health staff may not expect to be screened for substance use even though that is the standard of care in many states. Be prepared to use language that is easy to understand and explain that all people are screened. Try to express empathy with any concerns that people may have. Understand that your role is to screen and refer.

Situation	Examples of What to Say	Things to Think About
Welcome and introductions	"Welcome [name]! I am so glad that you were able to make it today. How are you doing?" "During today's session we will discuss	• The client may have other things on their mind when they first arrive (such as issues with getting to the appointment, a worry about a job, or



Situation	Examples of What to Say	Things to Think About
	your family's nutrition, breastfeeding, and how you're feeling emotionally and physically. We will also ask some standard questions about perinatal mood disorders and substance use."	<ul> <li>other personal issues). It is important to provide space for the client to express their feelings in a safe space.</li> <li>This interaction sets the tone for the rest of the session.</li> </ul>
Discussion on breastfeeding	<ul> <li>"How do you plan to feed your baby?</li> <li>Have you ever breastfed/pumped? Tell me about your breastfeeding (or pumping) experience or what you have heard about breastfeeding."</li> <li>"We recommend that anyone who is able to breastfeed, breastfeed their babies. Breastfeeding will support your baby's immune system and provide all the hydration and nutrition needed for development. Breastfeeding also releases hormones that can help improve mood."</li> <li>"Even people who plan to breastfeed can find it difficult and frustrating at first. Something that might help could be looking into a breastfeeding support group nearby. These groups can help you work through any challenges you may face and can be a great opportunity to meet other local parents."</li> <li>If the woman is not interested in or able to breastfeed:</li> <li>"Thank you for sharing that with me. We have many resources on how to feed your baby and understand your baby's feeding behaviors and cues. Breastfed or formulafed—there is no wrong way to feed your baby."</li> </ul>	<ul> <li>If the client is not interested in breastfeeding, consider why this may be. Is the client worried about family support of breastfeeding? Is the client worried about their ability to breastfeed? Please keep in mind that the client may already be aware of their physical inability to breastfeed given a history of mastectomy or breast surgery of any kind, and this may be an emotional subject for them.</li> <li>Be aware of your language and do not make the client feel guilty. While breastfeeding is recommended, the most important thing is that the infant is fed and cared for.</li> <li>Keep in mind your own feelings and experiences about breastfeeding. It is okay to recall your own experience with joy or sadness, but it is important to let the client's feelings guide the conversation.</li> </ul>
Discussion and screening for perinatal mood disorders	"Intense hormonal changes during pregnancy can make some people feel sad, anxious, or nervous. This is normal, but feeling extremely sad, hopeless, or worried may be a sign of depression or anxiety. As part of our routine pregnancy care, we ask all women questions about	<ul> <li>The Edinburgh Postnatal Depression Scale is recommended for use with pregnant people.</li> <li>Keep in mind your own feelings and experiences with depression or anxiety. It's okay to express empathy and understanding, as long as you</li> </ul>



Situation	Examples of What to Say	Things to Think About
	mood and anxiety." "I'd like to ask you a couple of quick questions about how you're feeling emotionally."	<ul> <li>always consider the client's needs and feelings.</li> <li>If the client scores high on the screening and you're worried about her, remain calm. Your role is to screen and refer to specialists, not to diagnose or provide direct care.</li> <li>Keep resources about depression or anxiety during pregnancy readily available in case of positive screens. Be able to connect clients with patient navigators, support groups, and physicians as needed.</li> </ul>
Discussion and screening for substance use	"As part of our routine pregnancy care, we ask everyone questions on substance use. I am going to ask you a few questions, this will only take a few minutes."	<ul> <li>The Integrated 5Ps screening tool is recommended for use with pregnant people.</li> <li>Keep in mind your own feelings and experiences with substance use. If you or someone you love is in recovery from substance use, asking these questions may bring up some uncomfortable feelings. Be sure to take time for yourself before or after the session to explore these feelings and take care of yourself.</li> <li>If the client scores high on the screening and you're worried about her and her child, remain calm. Your role is to screen and refer to specialists, not to diagnose or provide direct care.</li> <li>Keep resources about substance use during pregnancy readily available in case of positive screens. Be able to connect clients with physicians, patient navigators, and support groups, as needed.</li> </ul>



# Ashleigh and Riley: A Young Mother Participating in a Support Group



This activity will work best in small groups of 4-6. Please chose one person to act as Ashleigh and one to act as Riley. Read through each role play scenario and then role play the situation. Using the prompted questions, the rest of the group members can offer constructive feedback. Switch roles through the scenario until all group members have had a chance to participate.

Ashleigh is a family health advocate who facilitates a support group for parents and new caregivers in the county. The group serves people who are 18 years or older and are up to 30 weeks pregnant at the time of enrollment. These groups are designed to empower and support participants in a culturally appropriate setting that respects participant values and beliefs.

Ashleigh has been working with Riley since Ashleigh first started facilitating her current support group eight weeks ago. Riley, who is 27 weeks pregnant has a 3-year-old (Adam); they live with Riley's mother. Riley has been receiving WIC benefits since she was pregnant with Adam and continues to obtain both food and education through the WIC program.

During a meeting, Riley mentions she is taking medication for back pain. Because screening for

substance use is the standard of care in the state, Ashleigh had already screened Riley for substance use during an initial intake appointment using the <u>Integrated 5Ps screening tool</u>. Ashleigh recalls that Riley has had past difficulties with prescription medication and received an OUD diagnosis from her physician. Ashleigh decides to check up on Riley. She asks Riley if she would answer a few questions about her back pain once the rest of the group has left. Riley trusts Ashleigh and agrees.

#### **Role Play Scenario 1:**

Ashleigh asks Riley about her doctor visits and learns that the medication Riley is using was not prescribed by a doctor but obtained from a friend.

(Suggestions for facilitating comments and reactions from the group: What questions can Ashleigh ask to get information about the medication Riley is taking for her back pain? **Consider:** "Does your doctor know you're pregnant?" "Have you discussed with your doctor how to use the medication while pregnant?"

How can Ashleigh respond in a non-judgmental way, even when Riley's answers indicated that Riley had gotten her opioids from a friend? Was Ashleigh's body language appropriate and open? How could Ashleigh have better supported Riley throughout the conversation? Please add any additional thoughts



and observations.)

Ashleigh considers that Riley is not only parenting a young son, but that she is pregnant. Ashleigh explains that Riley and her family would benefit from seeing a physician who specializes in opioid use during pregnancy. Ashleigh explains that a specialist can help Riley manage her pain in a healthy way. Riley is receptive to Ashleigh's feedback because of built trust and how Ashleigh allows for open dialogue and questions. Riley asks where she can get help. Ashleigh and Riley engage in <u>shared decision-making</u> to determine the most appropriate next steps for Riley. Ashleigh gives Riley the phone number to a perinatal opioid use specialist at the county health department. Ashleigh explains how the specialist will work in a non-judgmental, empathetic way to provide support to help her achieve and live a healthy life.

#### **Role Play Scenario 2:**

Ashleigh refers Riley for further evaluation.

(Suggestions for facilitating comments and reactions from the group: Was Ashleigh clear that Riley should see a physician specialist for her opioid use? Did Ashleigh use language that could be perceived as judgmental? What else can Ashleigh do to help Riley connect with the opioid use specialist?" **Consider:** What feelings did this bring up for you? Please add any additional thoughts and observations.)

Riley and Ashleigh call the physician from Ashleigh's office and schedule a time for Riley, her mom, and Adam to meet at the physician's office. Ashleigh also provides Riley with informational <u>handouts</u> to share with her mom. The handouts explain how substance use disorder (SUD) treatment works and how families can support their loved ones with SUD. Riley leaves Ashleigh's office with a tangible next step and increased self-efficacy.

#### **Role Play Scenario 3:**

Ashleigh supports Riley in her next steps.

(Suggestions for facilitating comments and reactions from the group: Do you think that Riley feels supported in her next steps? Do you think that Riley will be present for her meeting with the physician? **Consider:** In your community, what resources do you have to offer a client like Riley for support? If you're unsure, who can you ask? Please add any additional thoughts and observations.)



# Alyssa and Michelle: A Home Visiting Postpartum Hemoglobin Check with a Field Nurse

This activity will work best in small groups of 4-6. Please choose one person to act as Alyssa and one to act as Michelle. Read through each role play scenario and then role play the situation. Using the prompted questions, the rest of the group members can offer constructive feedback. Switch roles through the scenario until all group members have had a chance to participate.



Alyssa has been a home-visiting program staff member at the county health department for six years. Michelle has been Alyssa's client throughout her pregnancy and gave birth to a healthy baby girl two days ago. Michelle has casually mentioned that prior to becoming pregnant, she misused substances, but reports that she has refrained from use throughout her pregnancy.

Alyssa has a planned home visit with Michelle for continued support and to assess if Michelle is at any risk for return to use. Alyssa also knows that 50% of women are affected by postpartum anemia, which has been linked to postpartum health problems, including depression and fatigue.<sup>163</sup> Alyssa coordinates with a field nurse who can conduct a postpartum hemoglobin test for anemia. After test, Alyssa also decides to screen Michelle for postpartum depression. The postpartum time period brings massive shifts in hormone levels, and the typical newborn sleep schedule can leave new parents feeling exhausted and fatigued, often leading to anxiety and depression. Alyssa uses a screening tool called the <u>Edinburgh</u> <u>Postnatal Depression Scale</u>, which is widely used in both the prenatal and postnatal period and takes less than five minutes to complete. Michelle's score on the screen does not indicate that she is feeling depressed, but Alyssa makes a note to screen Michelle again at her next visit, knowing how quickly things can change.

#### **Role Play Scenario 1:**

Alyssa screens Michelle for postpartum depression.



(Suggestions for facilitating comments and reactions from the group: What are some ways Alyssa can explain to Michelle why she was asking these questions? Was Alyssa's body language open and engaging? Did Alyssa make Michelle feel comfortable during the screen? **Consider:** What feelings did this bring up for you? Please add any additional thoughts and observations.)

Results from the Integrated 5Ps that Alyssa administered at the beginning of Michelle's pregnancy showed that Michelle screened negative to having used substances in the past 30 days. However, because Michelle casually mentioned having a history with SUD, Alyssa still monitors Michelle for changes. Alyssa asks Michelle about concerns in her life and learns that Michelle began to misuse substances again toward the very end of her pregnancy. Alyssa had established a safe and trusting relationship with Michelle throughout her pregnancy, so Michelle was comfortable being truthful with Alyssa about her substance use. Michelle shared that the stress of having a new child led her back to substance use. Alyssa knows that OUD is a chronic illness, and that relapses are to be expected.

### **Role Play Scenario 2:**

Alyssa learns through conversation that Michelle is using substances again. (Suggestions for facilitating comments and reactions from the group: How can Alyssa's body language be open and engaging, even when Michelle is answering that she is using substances? Was Alyssa supportive of Michelle's ability to recover? **Consider:** What feelings did this bring up for you? Please add any additional thoughts and observations.)

Alyssa checks her referral list to connect Michelle with the perinatal substance use specialist at the county health department. Alyssa knows that this substance use specialist can make home visits and lets Michelle know that she will follow up by phone tomorrow.

#### **Role Play Scenario 3:**

Alyssa supports Michelle in her next steps and referrals.

(Suggestions for facilitating comments and reactions from the group: How do you think Michelle feels after Alyssa leaves? How can Alyssa be clearer about what Michelle can expect and what Michelle's next steps should be? **Consider:** In your community, what resources do you have to offer a client like Michelle for support? If you're unsure, who can you ask? Please add any additional thoughts and observations.)



# Appendix A: Screening Tools and Resources

Maternal Depression Screening Tools

Resource Name	Website Link
<b>Edinburgh Depression Scale</b> This tool has been widely utilized as a reliable depression screening tool during and after pregnancy.	https://www.astho.org/global assets/pdf/edinburgh- postnatal-depression- scale.pdf
<b>Postpartum Depression Screening Scale</b> This tool was developed specifically for use during the postpartum period.	https://www.wpspublish.com /pdss-postpartum-depression- screening-scale

# Substance Use Screening Tools

Resource Name	Website Link
Integrated 5Ps: Prenatal Substance Abuse Screen for Alcohol and	https://www.astho.org/global
Drugs	assets/pdf/behavioral-health-
This resource was adapted specifically for pregnant women and asks	risks-screening-tool-for-
about a woman's parents' and partner's past and present alcohol	pregnant-women.pdf
and drug use.	
T-ACE	https://www.ncbi.nlm.nih.gov
Recommended by the American College of Obstetricians and	/pubmed/2712118
Gynecologists, this tool screens for alcohol use in pregnant women.	/publied/2/12118
Gynecologists, this tool screens for alcohol use in pregnant women.	
TWEAK	https://pubs.niaaa.nih.gov/pu
This five-question scale screens for alcohol use during pregnancy.	blications/assessingalcohol/In
	strumentPDFs/74_TWEAK.pdf
CAGE AID	https://www.pedagogyeducat
This screening tool for alcohol and drug use is not specific to	ion.com/PedagogyEducation/
pregnant or postpartum women.	media/Resources/Posters/CA
	GE-AID-Questionnaire.pdf
Alcohol Use Disorders Identification Test	https://www.drugabuse.gov/s
This screening tool for alcohol and drug use is not specific to	ites/default/files/files/AUDIT.
pregnant or postpartum women.	pdf
Drug Abuse Screening Test (DAST-10)	https://cde.drugabuse.gov/ins
This screening tool for alcohol and drug use is not specific to	trument/e9053390-ee9c-
pregnant or postpartum women.	9140-e040-bb89ad433d69
Screening, Brief Intervention, and Referral to Treatment	https://store.samhsa.gov/pro
This evidence-based intervention is used to identify, reduce, and	duct/TAP-33-Systems-Level-



prevent problematic use, abuse, and dependence on alcohol and	Implementation-of-Screening-
illicit drugs.	Brief-Intervention-and-
	Referral-to-Treatment-
	<u>SBIRT/SMA13-4741</u>

# Trauma-Informed Care Training Resources

Resource Name	Website Link
What is Trauma-Informed Care?This three-minute video provides a simple overview of trauma- informed care.Helping Children Recover from Trauma This National Council for Behavioral Health training webinar focuses on trauma in children.	https://www.traumainformed care.chcs.org/what-is-trauma- informed-care/ https://youtu.be/1pNwHMjPr xY
Creating a Trauma-Informed Home Visiting Program This HRSA issue brief is aimed at home visiting program staff.	https://mchb.hrsa.gov/sites/d efault/files/mchb/MaternalChi IdHealthInitiatives/HomeVisiti ng/Creating a Trauma Infor med Home Visiting Program Issue Brief January 2017.pd f
Trauma Responsive Understanding Self-Assessment These strengths-based organizational self-assessment tools provide organizations with a point in time "snapshot" of where they are in their journey toward becoming trauma-informed.	https://www.ccsi.org/Pages/T RUST
Glossary of Terms for Trauma-Informed, Integrated Healthcare This resource was developed by the New York State Trauma- Informed Network.	https://resources.traumainfor medny.org/resources/87



# Appendix B: Local and National Resources

California Community Resources

Resource Name	Website Link
Addiction Free CA This resource includes an interactive data dashboard, project resources, and a treatment provider locator to support the California Medications for Addiction Treatment Expansion Project. The site serves as a hub for providers, partners, and the public to identify data regarding treatment resources, infrastructure, and opioid response projects in California.	https://addictionfreeca.org/
ACEs Aware The Office of the California Surgeon General and the California Department of Health Care Services started ACEs Aware to give Medi-Cal providers training, clinical protocols, and payment for screening children and adults for adverse childhood experiences (ACEs).	https://www.acesaware.org/a bout-aces-aware/aces-aware/
ACEs Aware Stress Management Resource List This resource, part of California's ACEs Aware initiative, was developed in response to COVID-19. It aims to provide stress management resources for providers as well as general resources that providers can share with patients to increase buffering and protective factors to reduce the impact of toxic stress.	https://www.acesaware.org/h eal/covid19/
Alameda County Perinatal Substance Use Disorder Treatment Alameda offers two programs, " <u>Mujeres Con Esperanza/Women</u> with Hope: La Familia the Recovery and Wellness Services" and " <u>Project Pride</u> ." Both programs offer treatment for SUD and other resources for women with children or pregnant women dealing with addiction.	http://www.acbhcs.org/subst ance-use-treatment/
Butte County Stepping Stones Perinatal Program Stepping Stones is a perinatal program that provides comprehensive, family-based substance use treatment for pregnant and parenting women. Stepping Stones also aims to better the health of mother and child through counseling, education, and other resources.	https://www.buttecounty.net /behavioralhealth/substance- use/perinatal-program
Contra Costa County Perinatal Substance Abuse Partnership This organization provides alcohol and drug treatment, screening, assessment, referral, and training and education to pregnant and parenting women.	https://cchealth.org/psap/
Humboldt County Perinatal Substance Use Disorder Project This project strives to improve health outcomes for pregnant women and their infants. Humboldt's community partners focus on	https://www.nchiin.org/sud.a spx



Resource Name	Website Link
screening all women for substance use disorder (SUD), supporting providers in offering medication assisted treatment (MAT), and developing standardized guidelines for cannabis use during pregnancy.	
Los Angeles Shields for Families: Perinatal Substance Use Disorder Treatment Shields Perinatal Substance Use Disorder Treatment program focuses on strengthening family and community through education, counseling, and support. Services include comprehensive case management; individual, group, and family counseling; drug and alcohol education; life skill classes; and child development and parenting classes.	https://www.shieldsforfamilie s.org/perinatal-substance- abuse-treatment/
Merced County Perinatal Recovery Program The perinatal recovery program offers intake, assessment, treatment planning, counseling, collateral, crisis, discharge planning, aftercare, and referrals for pregnant and parenting women.	https://www.co.merced.ca.us /469/Perinatal-Recovery- Program
Orange County Health's Perinatal Program The Orange County Perinatal and Infant Assessment and Coordination Team program offers evidence-based SUD treatment for pregnant and parenting women. The program offers free support and helps refer women to necessary care. The team encourages an understanding and comfortable environment for the treatment and recovery process through education, teaching effective coping skills, creating safe living situations, and support for decreasing domestic violence and abuse.	https://www.ochealthinfo.co m/page/perinatal-and-infant- assessment-and-coordination- team-pact
Placer County Adult System of Care: Perinatal Treatment Programs The Placer County Perinatal Substance Abuse Treatment Program provides screening, assessment, inpatient and outpatient treatment, and transitional housing for women with minor children.	http://placer.networkofcare.o rg/mh/services/agency.aspx?p id=PlacerCountyAdultSystemo fCareASOCPerinatalTreatment Programs 175_2_0
San Mateo County Health Perinatal Addiction Outreach Team This group is composed of a home visiting team of social workers and community workers providing a range of screening, counseling, and care coordination services to pregnant or parenting women struggling with substance use and addiction.	https://www.smchealth.org/p re3
Santa Cruz Perinatal Services Santa Cruz County's perinatal programs, which include Janus of Santa Cruz, New Life Center Community Service Program, and Santa Cruz Residential Recovery, may offer treatment, education,	www.santacruzhealth.org/rec overywave/DIRECTORY/perina tal.html



Resource Name	Website Link
childcare, medical care, transportation, income support, and housing	
resources.	
Shasta County Perinatal Alcohol and Drug Program	https://www.co.shasta.ca.us/i
The Shasta County Perinatal Program provides services such as	ndex/hhsa_index/Alcohol_tob
addiction treatment, individual and group counseling, parenting	acco_and_other_drugs/perina
skills development, and case management. Women who are	tal_alcohol_and_drug_progra
pregnant and women up to two months postpartum are given top	<u>m.aspx</u>
priority. Transportation and childcare are available for clients.	

#### Health Coverage Options for Uninsured Pregnant Women in California

<u>Medi-Cal</u>, California's Medicaid agency, covers medical services, prenatal care, labor and delivery care, and dental care for qualifying individuals. After birth, any infant is automatically eligible for Medi-Cal for the first year of life with no family income limit. As of February 2019, Medi-Cal also reimburses individual or group counseling sessions for pregnant or postpartum women with certain depressive, socioeconomic, and mental health risk factors. These include perinatal depression, a history of depression, current depressive symptoms (that do not reach a diagnostic threshold), low income, adolescent or single parenthood, recent intimate partner violence, elevated anxiety symptoms, and a history of significant negative life events.

<u>AIM (Access for Infants and Mothers)</u> offers low-cost comprehensive care with no copayments, deductibles, or coinsurance. The infant is automatically eligible for Medi-Cal with no family income limit for the first year of life.

<u>Covered California</u> coverage plans include prenatal care and labor and delivery services in addition to postpartum care and breastfeeding support, supplies, and counseling.

Pregnant women who are neither citizens nor designated as "qualified aliens" are still eligible to apply for pregnancy-related Medi-Cal if their income falls under 213% of the federal poverty level. Pregnant women may also be eligible for AIM plans if their income falls between 213%-322% of the federal poverty level.

For more information visit the <u>Health Insurance Plans Info</u> website or the San Bernardino County <u>Transitional Assistance web page</u>.



## Making Referrals

Resource Name	Website Link
Cardea Technical Assistance Package: Supporting Substance Use	https://cardeaservices.org/res
Disorder Services Integration in Diverse Settings	ource/std ta package/
This toolkit provides basic information on SUD, an assessment for understanding bias, examples of people-friendly language, and strategies for patient engagement.	
HRSA's Home Visiting Program: Supporting Families Impacted by	https://mchb.hrsa.gov/sites/d
Opioid Use and Neonatal Abstinence Syndrome This issue brief and resource guide was developed to help educate	efault/files/mchb/MaternalChi IdHealthInitiatives/HomeVisiti ng/MIECHV-Opioid-NAS-
and inform awardees of HRSA's Maternal, Infant, and Early Childhood Home Visiting (MIECHV) funding on opioid use and neonatal abstinence syndrome.	Resource.pdf
SAMHSA's Clinical Guidance for Treating Pregnant and Parenting	https://store.samhsa.gov/pro
Women with Opioid Use Disorder and their Infants	duct/Clinical-Guidance-for- Treating-Pregnant-and-
This guidance describes clinical recommendations for providers to	Parenting-Women-With-
consider when treating pregnant or parenting women with opioid use disorder.	Opioid-Use-Disorder-and- Their-Infants/SMA18-5054
Blank lines should be left for agencies to fill in local resources for making referrals. Community resource mapping should be used to ensure this section is complete. Women-centered programs should be included here.	



Resource Name	Website Link

### Academic and Educational Resources

Resource Name	Website Link
ASTHO Guide—Practicing Self-Care in the COVID-19 Response: A	https://www.astho.org/COVID
Guide for Public Health Professionals	-19/Practicing-Self-Care/
This brief guide outlines strategies and resources to help public health professionals practice self-care while engaging in COVID-19 response.	
ASTHOBrief—Adverse Childhood Experiences: Primary Prevention	http://www.astho.org/ASTHO Briefs/Adverse-Childhood-
This brief provides examples of strategies for primary prevention of adverse childhood experiences (ACES), including building skills and promotion norms for positive parenting and strengthening economic supports for families.	Experiences-Primary- Prevention/
ASTHOConnects—Medication-Assisted Treatment During Pregnancy: Current Research, Practice Recommendations, and State Policy Considerations This webinar discusses current research and treatment recommendations related to medication-assisted treatment (MAT) during pregnancy, state policy considerations, and opportunities for Title V programs.	https://www.astho.org/generi ckey/GenericKeyDetails.aspx? contentid=22162&folderid=51 62&catid=7254
ASTHOExperts Blog—Reducing the Stigma of Substance Use Disorder Prevention and Treatment This blog describes how language can cause stigma related to substance use disorder and medication-assisted treatment. The blog also describes state legislation aimed at reducing stigma by changing language.	http://www.astho.org/StateP ublicHealth/Reducing-the- Stigma-of-Substance-Use- Disorder-Prevention-and- Treatment/03-22-18/
ASTHOExperts Podcast—Looking Upstream: The Impact of Preventing Adverse Childhood Experiences This podcast episode discusses how early life experiences shape brain development and brain plasticity. It also describes how the Texas Department of State Health Services and University of Texas System are taking action to research and address ACES.	http://www.astho.org/generic key/GenericKeyDetails.aspx?c ontentid=21407&folderid=515 8&catid=7247



ASTHOReport—Data-Driven Primary Prevention Strategies for Adverse Childhood Experiences       http://www.astho.org/ASTHO Reports/Data-Driven-Primary. Prevention-Strategies-for- Adverse-Childhood.         This report discusses data sources related to adverse childhood experiences, provides examples of how states can use these data, and offers resources for developing data sharing agreements.       http://www.astho.org/Prevent infor/NAS-Neonatal- AstHOReport—Neonatal Abstinence Syndrome: How States Can Help Advance the Knowledge Base for Primary Prevention and Best Practices of Care       http://www.astho.org/Preven tion/NAS-Neonatal- Astience-Report/         This report provides an overview of neonatal abstinence syndrome and describes how states addressing knowledge gaps through interdepartmental efforts, perinatal learning collaboratives, and quality improvement initiatives.       http://www.astho.org/ASTHO Reports/Role-of-State-Health- Leaders-in-Addressing; Substance Use Disorders Among Women, Infants, and Families         ASTHOReport—The Role of State Health Leaders in Addressing syndrome, including roles of state health leaders in each approach.       http://www.astho.org/ASTHO Reports/Role-of-State-Health- Leaders-in-Addressing; Substance Use Disorders among Women, Infants, and Families         Alliance for Innovation (AIM) on Maternal Health Patient Safety Bundle Resources: Obstetric Care for Women with Opioid Use Disorder       https://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant.women- prescription-drug-abuse- dependence-aadd prictics. <sup>104</sup> Cardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settings       https://cardeaservices.org/resource/std ta_ package/         This techn	Resource Name	Website Link
This report discusses data sources related to adverse childhood     Prevention-Strategies-for- Adverse-Childhood- Experiences, provides examples of how states can use these data, and offers resources for developing data sharing agreements.     Prevention-Strategies-for- Adverse-Childhood- Experiences/07-30-19/       ASTHOReport—Neonatal Abstinence Syndrome: How States Can Help Advance the Knowledge Base for Primary Prevention and Best Practices of Care     http://www.astho.org/Preven tion/NAS-Neonatal- Abstinence-Report/       This report provides an overview of neonatal abstinence syndrome and describes how states addressing knowledge gaps through interdepartmental efforts, perinatal learning collaboratives, and quality improvement initiatives.     http://www.astho.org/ASTHO Reports/Role-of-State-Health- Leaders-in-Addressing: Substance Use Disorders Among Women, Infants, and Families       Substance Use Disorders Among Women, Infants, and Families Incidence of substance use disorder and neonatal abstinence syndrome, including roles of state health leaders in each approach.     http://www.astho.org/ASTHO Reports/Role-of-State-Health- Leaders-in-Addressing: Substance-Use-Disorders: Among-Women-Infants-and- Families/12-20-18/       Alliance for Innovation (AIM) on Maternal Health Patient Safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> https://www.astho.org/global assets/pdf/state-legislation- toolkit.pregnant.women- prescription-drug-abuse- dependence-and Addiction       Dependence and Addiction     prescription Drug Abuse, Dependence and Addiction prescription Drug Abuse, Dependence and Addiction presc Settings       This technical Assistance Package: Supporting Substance Use Diso	ASTHOReport—Data-Driven Primary Prevention Strategies for	http://www.astho.org/ASTHO
This report discusses data sources related to adverse childhood experiences, provides examples of how states can use these data, and offers resources for developing data sharing agreements.Adverse-Childhood- Experiences/07-30-19/ASTHOReport—Neonatal Abstinence Syndrome: How States Can Help Advance the Knowledge Base for Primary Prevention and Best Practices of Carehttp://www.astho.org/Preven tion/NAS-Neonatal- Abstinence-Report/This report provides an overview of neonatal abstinence syndrome and describes how states addressing knowledge gaps through interdepartmental efforts, perinatal learning collaboratives, and quality improvement initiatives.http://www.astho.org/ASTHO Reports/Role-OFState-Health- Leaders-in-Addressing Substance Use Disorders Among Women, Infants, and Familieshttp://www.astho.org/ASTHO Reports/Role-OFState-Health- Leaders-in-Addressing Substance-Use-Disorders- Among-Women-Infants-and- Families/12-20-18/Alliance for Innovation (AIM) on Maternal Health Patient Safety Bundle Resources: Obstetric Care for Women with Opioid Use Disorderhttps://www.astho.org/global assets/pdf/state-legislation- topioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder Safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices.144https://www.astho.org/global assets/pdf/state-legislation- toolkit.pregnant.women- prescription-drug-abuse- dependence and AddictionCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std ta_package/ <td>Adverse Childhood Experiences</td> <td>Reports/Data-Driven-Primary-</td>	Adverse Childhood Experiences	Reports/Data-Driven-Primary-
experiences, provides examples of how states can use these data, and offers resources for developing data sharing agreements.Experiences/07-30-19/ASTHOReport—Neonatal Abstinence Syndrome: How States Can Help Advance the Knowledge Base for Primary Prevention and Best Practices of Carehttp://www.astho.org/Preven tion/NAS-Neonatal- Abstinence-Report/This report provides an overview of neonatal abstinence syndrome and describes how states addressing knowledge gaps through interdepartmental efforts, perinatal learning collaboratives, and quality improvement initiatives.http://www.astho.org/ASTHOASTHOReport—The Role of State Health Leaders in Addressing substance Use Disorders Among Women, Infants, and Familieshttp://www.astho.org/ASTHOReports_The Role of State Health Leaders in each approach.http://www.astho.org/ASTHOASTHOReport—The Role of state health leaders in each approach.Reports/Role-of-State-Health- Leaders-in-Addressing. Substance Use-Disorders.Mulae for Innovation (AIM) on Maternal Health Patient Safety Bundle Resources: Obstetric Care for Women with Opioid Use Disorderhttps://safehealthcareforever women-with-opioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety- bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. Dependence and Addictionhttps://www.astho.org/global assets/pdf/state-legislation- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshtttps://www.chosencollab		Prevention-Strategies-for-
and offers resources for developing data sharing agreements.http://www.astho.org/PrevenASTHOReport—Neonatal Abstinence Syndrome: How States Can Help Advance the Knowledge Base for Primary Prevention and Best Practices of Carehttp://www.astho.org/Preven tion/NAS-Neonatal- Abstinence-Report/This report provides an overview of neonatal abstinence syndrome and describes how states addressing knowledge gaps through interdepartmental efforts, perinatal learning collaboratives, and quality improvement initiatives.http://www.astho.org/ASTHO Reports/Collaboratives, and quality improvement initiatives.ASTHOReport—The Role of State Health Leaders in Addressing 	This report discusses data sources related to adverse childhood	Adverse-Childhood-
ASTHOReport – Neonatal Abstinence Syndrome: How States Can Help Advance the Knowledge Base for Primary Prevention and Best Practices of Carehttp://www.astho.org/Preven tion/NAS-Neonatal- Abstinence-Report/This report provides an overview of neonatal abstinence syndrome and describes how states addressing knowledge gaps through interdepartmental efforts, perinatal learning collaboratives, and quality improvement initiatives.http://www.astho.org/ASTHO Report—The Role of State Health Leaders in Addressing Substance Use Disorders Among Women, Infants, and Familieshttp://www.astho.org/ASTHO Reports/Role-of-State-Health- Leaders-in-Addressing- Substance Use Disorders and neonatal abstinence syndrome, including roles of state health leaders in each approach.http://www.astho.org/ASTHO Reports/Role-of-State-Health- Leaders-in-Addressing- Substance-Use-Disorders- Among-Women-Infants-and- Families/12-20-18/Alliance for Innovation (AIM) on Maternal Health Patient Safety Bundle Resources: Obstetric Care for Women with Opioid Use Disorderhttps://safehealthcareforever woman.org/patient-safety- bundles/obstetric-care-for- women-with-opioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> Cardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://www.astho.org/plobla assets/pdf/state-legislation: toolkit-pregnant-women- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package includes tools for understa	experiences, provides examples of how states can use these data,	Experiences/07-30-19/
Help Advance the Knowledge Base for Primary Prevention and Best Practices of Caretion/NAS-Neonatal- Abstinence-Report/This report provides an overview of neonatal abstinence syndrome and describes how states addressing knowledge gaps through interdepartmental efforts, perinatal learning collaboratives, and quality improvement initiatives.http://www.astho.org/ASTHO Report/-The Role of State Health Leaders in Addressing Substance Use Disorders Among Women, Infants, and Familieshttp://www.astho.org/ASTHO Reports/Role-of-State-Health- Leaders-in-Addressing.This report highlights six public health approaches for addressing incidence of substance use disorder and neonatal abstinence syndrome, including roles of state health leaders in each approach.https://safehealthcareforever ywoman.org/astient-safetyBundle Resources: Obstetric Care for Women with Opioid Use Disorderhttps://safehealthcareforever ywoman.org/patient-safety- bundles/obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving are processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> https://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence and AddictionCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and estalishing referral networks.https://www.chosencollabora tive.org/provider-video-	and offers resources for developing data sharing agreements.	
Practices of CareAbstinence-Report/This report provides an overview of neonatal abstinence syndrome and describes how states addressing knowledge gaps through interdepartmental efforts, perinatal learning collaboratives, and quality improvement initiatives.http://www.astho.org/ASTHO Reports/Octo-fState-Health Leaders-in-Addressing Substance Use Disorders Among Women, Infants, and Familieshttp://www.astho.org/ASTHO Reports/Octo-fState-Health- Leaders-in-Addressing Substance Use Disorders Among Women, Infants, and Familieshttp://www.astho.org/ASTHO Reports/Octo-fState-Health- Leaders-in-Addressing Substance Use-Disorders.This report highlights six public health approaches for addressing incidence of substance use disorder and neonatal abstinence syndrome, including roles of state health leaders in each approach.https://www.astho.org/ASTHO Reports/Addressing: Substance-Use-Disorders.Alliance for Innovation (AIM) on Maternal Health Patient Safety Bundle Resources: Obstetric Care for Women with Opioid Use Disorderhttps://safehealthcareforever ywoman.org/patient-safety- bundles/obstetric-care-for- women-with-opioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> https://www.astho.org/global assets/pdf/state-legislation: toolkit-pregnant-women- prescription-drug-abuse- dependence-addiction_pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std_ta_package/ <tr< td=""><td>ASTHOReport—Neonatal Abstinence Syndrome: How States Can</td><td>http://www.astho.org/Preven</td></tr<>	ASTHOReport—Neonatal Abstinence Syndrome: How States Can	http://www.astho.org/Preven
This report provides an overview of neonatal abstinence syndrome and describes how states addressing knowledge gaps through interdepartmental efforts, perinatal learning collaboratives, and quality improvement initiatives.http://www.astho.org/ASTHO Report—The Role of State Health Leaders in Addressing Substance Use Disorders Among Women, Infants, and Familieshttp://www.astho.org/ASTHO Reports/Role-of-State-Health- Leaders-in-Addressing- Substance use disorder and neonatal abstinence syndrome, including roles of state health leaders in each approach.http://www.astho.org/ASTHO Reports/Role-of-State-Health- Leaders-in-Addressing- Substance-Use-Disorders- Among-Women-Infants-and- Families/12-20-18/Alliance for Innovation (AIM) on Maternal Health Patient Safety Bundle Resources: Obstetric Care for Women with Opioid Use Disorderhttps://safehealthcareforever ywoman.org/patient-safety- bundles/obstetric-care-for- women-with-opioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> https://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollabora tive.org/provider-video-	Help Advance the Knowledge Base for Primary Prevention and Best	tion/NAS-Neonatal-
and describes how states addressing knowledge gaps through interdepartmental efforts, perinatal learning collaboratives, and quality improvement initiatives.http://www.astho.org/ASTHO ReportThe Role of State Health Leaders in Addressing Substance Use Disorders Among Women, Infants, and Familieshttp://www.astho.org/ASTHO ReportSole-of-State-Health- Leaders-in-Addressing- Substance-Use-Disorders- Among-Women, including roles of state health leaders in each approach.http://www.astho.org/ASTHO ReportSole-of-State-Health- Leaders-in-Addressing- Substance-Use-Disorders- Among-Women-Infants-and- Families/12-20-18/Alliance for Innovation (AIM) on Maternal Health Patient Safety Bundle Resources: Obstetric Care for Women with Opioid Use Disorderhttps://safehealthcareforever ywoman.org/patient-safety- bundles/obstetric-care-for- women-with-opioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> https://www.astho.org/global assets/pdf/state-legislation- toolkit_on_drug-abuse_ dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollabora tive.org/provider-video-Colorado Hospital'Substance Exposed Newborns Collaborative (CHOSEN) Collaborative Provider Video Resource Lib	Practices of Care	Abstinence-Report/
Substance Use Disorders Among Women, Infants, and FamiliesReports/Role-of-State-Health- Leaders-in-Addressing Substance use disorder and neonatal abstinence syndrome, including roles of state health leaders in each approach.Reports/Role-of-State-Health- Leaders-in-Addressing. Substance-Use-Disorders- Among-Women-Infants-and- Families/12-20-18/Alliance for Innovation (AIM) on Maternal Health Patient Safety Bundle Resources: Obstetric Care for Women with Opioid Use Disorderhttps://safehealthcareforever ywoman.org/patient-safety- bundles/obstetric-care-for- women-with-opioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> https://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollabora tive.org/provider-video-	and describes how states addressing knowledge gaps through interdepartmental efforts, perinatal learning collaboratives, and	
Substance Use Disorders Among Women, Infants, and FamiliesReports/Role-of-State-Health- Leaders-in-Addressing Substance use disorder and neonatal abstinence syndrome, including roles of state health leaders in each approach.Reports/Role-of-State-Health- Leaders-in-Addressing. Substance-Use-Disorders- Among-Women-Infants-and- Families/12-20-18/Alliance for Innovation (AIM) on Maternal Health Patient Safety Bundle Resources: Obstetric Care for Women with Opioid Use Disorderhttps://safehealthcareforever ywoman.org/patient-safety- bundles/obstetric-care-for- women-with-opioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> https://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollabora tive.org/provider-video-	ASTHOReport—The Role of State Health Leaders in Addressing	http://www.astho.org/ASTHO
This report highlights six public health approaches for addressing incidence of substance use disorder and neonatal abstinence syndrome, including roles of state health leaders in each approach.Leaders-in-Addressing: Substance-Use-Disorders- Among-Women-Infants-and- Families/12-20-18/Alliance for Innovation (AIM) on Maternal Health Patient Safety Bundle Resources: Obstetric Care for Women with Opioid Use Disorderhttps://safehealthcareforever ywoman.org/patient-safety- bundles/obstetric-care-for- women-with-opioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> https://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence and AddictionCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollabora tive.org/provider-video-		
This report highlights six public health approaches for addressing incidence of substance use disorder and neonatal abstinence syndrome, including roles of state health leaders in each approach.Substance-Use-Disorders- Among-Women-Infants-and- Families/12-20-18/Alliance for Innovation (AIM) on Maternal Health Patient Safety Bundle Resources: Obstetric Care for Women with Opioid Use Disorderhttps://safehealthcareforever ywoman.org/patient-safety- bundles/obstetric-care-for- women-with-opioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> https://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence and AddictionCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollabora tive.org/provider-video-		
syndrome, including roles of state health leaders in each approach.Families/12-20-18/Alliance for Innovation (AIM) on Maternal Health Patient Safety Bundle Resources: Obstetric Care for Women with Opioid Use Disorderhttps://safehealthcareforever ywoman.org/patient-safety- bundles/obstetric-care-for- women-with-opioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> https://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence and AddictionCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollaborative tive.org/provider-video-	This report highlights six public health approaches for addressing	
Alliance for Innovation (AIM) on Maternal Health Patient Safety Bundle Resources: Obstetric Care for Women with Opioid Use Disorderhttps://safehealthcareforever ywoman.org/patient-safety- bundles/obstetric-care-for- women-with-opioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> https://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence and AddictionCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollaborative tive.org/provider-video-	incidence of substance use disorder and neonatal abstinence	Among-Women-Infants-and-
Bundle Resources: Obstetric Care for Women with Opioid Use Disorderywoman.org/patient-safety- bundles/obstetric-care-for- women-with-opioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> disorder/American College of Obstetricians and Gynecologists Toolkit on State Legislation: Pregnant Women and Prescription Drug Abuse, Dependence and Addictionhttps://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollaborative tive.org/provider-video-	syndrome, including roles of state health leaders in each approach.	Families/12-20-18/
Bundle Resources: Obstetric Care for Women with Opioid Use Disorderywoman.org/patient-safety- bundles/obstetric-care-for- women-with-opioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> disorder/American College of Obstetricians and Gynecologists Toolkit on State Legislation: Pregnant Women and Prescription Drug Abuse, Dependence and Addictionhttps://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollaborative tive.org/provider-video-		
Disorderbundles/obstetric-care-for- women-with-opioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> disorder/American College of Obstetricians and Gynecologists Toolkit on State Legislation: Pregnant Women and Prescription Drug Abuse, Dependence and Addictionhttps://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollaborative (CHOSEN) Collaborative Provider Video Resource Library		
Momen-with-opioid-use- disorder/This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> American College of Obstetricians and Gynecologists Toolkit on State Legislation: Pregnant Women and Prescription Drug Abuse, Dependence and AddictionMetrican College of Obstetricians and Gynecologists Toolkit on State Legislation: Pregnant Women and Prescription Drug Abuse, Dependence and AddictionCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse SettingsThis technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.Colorado Hospital Substance Exposed Newborns Collaborative (CHOSEN) Collaborative Provider Video Resource Library		
This webpage describes the evidence-based practices that make up the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> disorder/American College of Obstetricians and Gynecologists Toolkit on State Legislation: Pregnant Women and Prescription Drug Abuse, Dependence and Addictionhttps://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollabora tive.org/provider-video-Colorado Hospital Substance Exposed Newborns Collaborative (CHOSEN) Collaborative Provider Video Resource Libraryhttps://www.chosencollabora tive.org/provider-video-	Disorder	
the AIM Obstetric Care for Women with Opioid Use Disorder safety bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. 164https://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant Women and Prescription Drug Abuse, Dependence and Addictionhttps://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollaborative (CHOSEN) Collaborative Provider Video Resource Library	The second s	
bundle. A patient safety bundle is a structured way of improving care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> https://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant Women and Prescription Drug Abuse, Dependence and Addictionhttps://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollabora tive.org/provider-video-		<u>disorder/</u>
care processes and patient health outcomes through a small set of evidence-based practices. <sup>164</sup> https://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant Women and Prescription Drug Abuse, Dependence and Addictionhttps://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollaborative tive.org/provider-video-		
evidence-based practices.164https://www.astho.org/globalAmerican College of Obstetricians and Gynecologists Toolkit on State Legislation: Pregnant Women and Prescription Drug Abuse, Dependence and Addictionhttps://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollabora tive.org/provider-video-		
American College of Obstetricians and Gynecologists Toolkit on State Legislation: Pregnant Women and Prescription Drug Abuse, Dependence and Addictionhttps://www.astho.org/global assets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollabora tive.org/provider-video-		
Legislation: Pregnant Women and Prescription Drug Abuse, Dependence and Addictionassets/pdf/state-legislation- toolkit-pregnant-women- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollabora tive.org/provider-video-		https://www.astho.org/global
Dependence and Addictiontoolkit-pregnant-women- prescription-drug-abuse- dependence-addiction.pdfCardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollabora tive.org/provider-video-Colorado Hospital Substance Exposed Newborns Collaborative (CHoSEN) Collaborative Provider Video Resource Libraryhttps://www.chosencollabora tive.org/provider-video-		
Cardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollabora tive.org/provider-video-		
Cardea Technical Assistance Package: Supporting Substance Use Disorder Services Integration in Diverse Settingshttps://cardeaservices.org/res ource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollabora tive.org/provider-video-		
Disorder Services Integration in Diverse Settingsource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.ource/std_ta_package/Colorado Hospital Substance Exposed Newborns Collaborative (CHoSEN) Collaborative Provider Video Resource Libraryhttps://www.chosencollabora tive.org/provider-video-		dependence-addiction.pdf
Disorder Services Integration in Diverse Settingsource/std_ta_package/This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.ource/std_ta_package/Colorado Hospital Substance Exposed Newborns Collaborative (CHoSEN) Collaborative Provider Video Resource Libraryhttps://www.chosencollabora tive.org/provider-video-		
This technical assistance package includes tools for understanding SUD in women, screening tools, patient engagement strategies, and establishing referral networks.https://www.chosencollabora tive.org/provider-video-Colorado Hospital Substance Exposed Newborns Collaborative (CHoSEN) Collaborative Provider Video Resource Libraryhttps://www.chosencollabora tive.org/provider-video-		
SUD in women, screening tools, patient engagement strategies, and establishing referral networks.       https://www.chosencollabora         Colorado Hospital Substance Exposed Newborns Collaborative (CHoSEN) Collaborative Provider Video Resource Library       https://www.chosencollabora	Disorder Services Integration in Diverse Settings	ource/std_ta_package/
SUD in women, screening tools, patient engagement strategies, and establishing referral networks.       https://www.chosencollabora         Colorado Hospital Substance Exposed Newborns Collaborative (CHoSEN) Collaborative Provider Video Resource Library       https://www.chosencollabora	This technical assistance nackage includes tools for understanding	
establishing referral networks.          Colorado Hospital Substance Exposed Newborns Collaborative (CHoSEN) Collaborative Provider Video Resource Library       https://www.chosencollabora         tive.org/provider-video-		
Colorado Hospital Substance Exposed Newborns Collaborativehttps://www.chosencollabora(CHoSEN) Collaborative Provider Video Resource Librarytive.org/provider-video-		
(CHoSEN) Collaborative Provider Video Resource Library tive.org/provider-video-		https://www.chosencollabora
		resource-library.html



Resource Name	Website Link
The Colorado Hospital Substance Exposed Newborns (CHoSEN)	
Collaborative has developed a short series of videos for healthcare	
providers on the following topics:	
The CHoSEN Collaborative.	
Breastfeeding.	
<ul> <li>Non-pharmacologic interventions.</li> </ul>	
• Safe discharge.	
Prenatal consultation.	
Eat Sleep Console provider training.	
Healthy Start EPIC Center's <u>State Legislation on Substance Use</u>	http://www.healthystartepic.
During Pregnancy: A Self-Study Guide	org/wp-
	content/uploads/2019/05/JSI-
This guide was designed to help individuals deepen their	SU-and-Pregnancy-Resource-
understanding of state laws and policies that establish legal	Guide.pdf
consequences for women who use substances during pregnancy.	
National Academy for State Health Policy State Options for	https://nashp.org/wp-
Promoting Recovery among Pregnant and Parenting Women with	content/uploads/2018/10/NO
Opioid or Substance Use Disorder	SLO-Opioids-and-Women-
	Final.pdf
This issue brief provides information about interagency approaches	
to treating and supporting pregnant and parenting women with	
substance use disorder in Colorado, Pennsylvania, and Texas.	
Perinatal Substance Use Practice Bundle: A Toolkit for Indiana	https://www.in.gov/laboroflo
Hospitals	ve/files/perinatal-substance-
	use-protocol-bundle.pdf
This document developed by the Indiana Perinatal Quality	
Collaborative (IPQIC) establishes a uniform identification and	
intervention process for perinatal substance use, from prenatal	
screening to discharge planning and follow-up.	
SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed	https://store.samhsa.gov/syst
Approach	em/files/sma14-4884.pdf
This paper aims to develop a working concept of trauma and a	
trauma-informed approach that is acceptable and appropriate	
across diverse service systems and stakeholder groups.	
Substance Use Prevention: Screening, Education, and Referral	https://wicworks.fns.usda.gov
Resource Guide for Local WIC Agencies	/sites/default/files/media/doc
	ument/ResourceManual%20re
This resource guide aims to assist local WIC staff in integrating	<u>v%204-17-18.pdf</u>
substance use information and referral into WIC activities, without	
overburdening participants or staff or reducing other WIC activities.	



Resource Name	Website Link
University of Maryland Baltimore County Maternal Infant and Early	https://homevisitingtraining.u
Childhood Home Visiting Training Program Substance Use	mbc.edu/curriculum/substanc
Curriculum	<u>e-use</u>
This curriculum aims to increase the knowledge, skills, and confidence of home visitors and their supervisors in addressing substance use disorder in families.	
University of Albany School of Public Health Breastfeeding	https://www.albany.edu/cphc
Recommendations for Women Impacted by Opioid Use Disorder and	<u>e/bfgr19.shtml</u>
Infants with Neonatal Abstinence Syndrome	
This webcast provides resources for identifying pregnant and parenting women with opioid use disorder (OUD), strategies and tools for discussing OUD with women, and referral approaches.	



### Appendix C: Full Text Scenarios

Below are extended versions of the training scenarios discussed above in the toolkit. It may be useful for trainers to read the full text of each scenario before facilitating the role play scenarios. Trainers can choose to add additional details or have participants read through the longer scenarios if the group is having trouble imagining the broader context of each situation.



#### Noelle and Sam: An Initial Visit with a Pregnant Mother

Noelle is a public health program staff member who has been working at the county health department for five years. Noelle understands that her job is more than just providing basic nutritional information to pregnant and new mothers: she gets to know the women and families she interacts with. She actively listens to their concerns, allows them space to ask questions and share their feelings, and works with them on goal setting and motivation to accomplish those goals. When mothers and families walk through the doors of Noelle's office, she treats them with respect, and always offers a helping hand. Noelle has been trained in <u>participant-centered education</u> and leads individual and group education classes at the county health department. Noelle loves to share information about the nutrition and healthy eating with her clients because she knows that her clients enjoy local farmers markets and that buying locally grown food supports the local economy. Noelle often talks with her clients about breastfeeding and is proud of how many women feel empowered to breastfeed as a result of their conversations.



Noelle's next client is Sam, a 27-year-old woman who is six months pregnant with her first child. Noelle has not met Sam before, so she carefully reviews her intake paperwork prior to her arrival. She notices that Sam has been to the county health department clinic in the past but has listed multiple addresses. This makes Noelle wonder about the stability of Sam's living situation and whether she has the tools she needs to make healthy choices for her growing family. When Sam comes to Noelle's office, Noelle welcomes her and takes the time to talk through Sam's questions and listen to her concerns. Noelle makes sure that she is addressing the issues that are important to Sam and not just sharing information that she thinks Sam needs. Noelle is putting Sam's needs first. Noelle talks about healthy foods and ask about Sam's intention to breastfeed. Sam intends to breastfeed but is nervous about both her ability to do so and her family's support. Noelle provides information on <u>breastfeeding</u> and the time and location of a breastfeeding support group near Sam's home. Noelle suggests that Sam attend a class before her baby is born so that she knows what to expect postpartum.

Because it is the standard of care in the state, Noelle decides to screen Sam for depression using a common screening tool called the <u>Edinburgh Postnatal Depression Scale</u>. This simple, 10-question scale is widely used in both the prenatal and postnatal period and takes less than five minutes to complete. Noelle provides Sam with the easy-to-read questionnaire for Sam to fill out. Noelle does not have to administer this screening herself; her role is to simply add up the score and refer Sam for additional support if needed. Sam's results indicate that she is likely experiencing depression. Noelle gives Sam information about maternal depression and gives her the name of a doctor who specializes in mental and emotional health for new mothers. This doctor has an office near Sam's home. Sam worries aloud about her ability to afford the copay of a visit to a specialist. Noelle explains that the doctor she recommended accepts Medicaid and participates in Sam's Medicaid managed care plan, so Sam will not have to pay for her visit. Noelle also provides Sam with the name of a maternal depression <u>support</u> group that meets near Sam's home. Noelle tells Sam about Rose, a patient navigator in the county health department who can help ensure that Sam is able to connect with this doctor. Noelle promises to introduce them before Sam leaves that day.

It is the standard of care in the state to screen for substance use during pregnancy. Noelle asks Sam if she doesn't mind being asked a couple more questions. Noelle has taken the time to actively listen to Sam throughout the course of their interaction and has earned Sam's trust. Sam agrees to a screening. Noelle uses the <u>Integrated 5Ps screening tool</u>, which typically takes less than three minutes to complete. This tool does not require extensive training to administer. Sam's answers indicate that she had issues with alcohol in the past but has not used any alcohol, drugs, cigarettes, or illicit drugs since becoming pregnant. Noelle praises Sam's healthy choices.

Noelle finishes their appointment by asking Sam if she has any other questions. When Sam says no, Noelle walks Sam over to meet with Rose, who will ensure that Sam gets an appointment with the doctor who will work with Sam on her depression. Sam leaves Noelle's office feeling good about her decisions not to drink during her pregnancy. Sam also feels motivated to go to a maternal depression support group and understands how the healthy foods provided through the program can support the physical and mental well-being of herself and her infant.



#### Ashleigh and Riley: A Young Mother Participating in a Support Group



Ashleigh is a family health advocate who facilitates a support group for parents and new caregivers in the county. The group serves people who are 18 years or older and are up to 30 weeks pregnant at the time of enrollment. Ashleigh has led three different support groups, with each group meeting 10 times before birth and 10 times after babies are born.

These support groups are designed to empower and support participants in a culturally appropriate setting that respects participant values and beliefs. Through these groups, Ashleigh provides people with a safe space to discuss the wide range of emotions they are feeling before and after giving birth to a child. Ashleigh guides participants through discussions on topics like healthy pregnancy, stress management, and cultural heritage as a source of pride. Ashleigh also serves as a case manager, helping people in her group navigate the healthcare system, including helping with health insurance applications.

Ashleigh has been working with Riley since she first started facilitating her current support group eight weeks ago. Riley, who is 27 weeks pregnant has a 3year-old (Adam); they live with Riley's mother. Riley has been receiving WIC benefits since she was pregnant with Adam and continues to obtain both

food and education through the WIC program. During the group sessions, Riley has shared that her home environment is stable. Her mother owns her home, and Riley and her mother have a healthy relationship. Adam is a happy and healthy child who is developing typically.

On a warm Monday afternoon, Ashleigh welcomes Riley and seven other women into her space to begin their group session. This session is focused on newborn care. Ashleigh actively listens to the group's questions and concerns. Ashleigh has spent the last eight weeks building trust between the participants, and they feel comfortable sharing their apprehension and excitement around taking care of a newborn. The group continues for an hour, and Ashleigh concludes by reviewing the key points that were discussed during the session and thanking everyone for attending.

During a meeting, Riley mentions she is taking medication for back pain. Because screening for substance use is the standard of care in the state, Ashleigh had already screened Riley for substance use during an initial intake appointment using the <u>Integrated 5Ps screening tool</u>. However, Ashleigh recalls that Riley has had past difficulties with prescription medication and received an OUD diagnosis from her physician. Ashleigh decides to check up on Riley. She asks Riley if she would answer a few questions about her back pain once the rest of the group has left. Riley trusts Ashleigh and agrees. Ashleigh asks Riley about her doctor visits and learns that the medication Riley is using was not prescribed by a doctor



but obtained from a friend. Ashleigh considers that Riley is not only parenting a young son, but that she is pregnant.

Ashleigh calmly talks with Riley about her opioid use and explains how misusing prescription opioids could be harmful for Riley. In addition to the health risks for Riley, it may also impact Adam's development and place her baby at risk for developing withdrawal symptoms. Ashleigh is careful with her language and makes sure to stress that her main concern is the health and well-being of Riley and her children. Ashleigh explains the incredibly addicting nature of opioids, and that there is treatment available to help Riley.

Ashleigh explains that Riley and her family would benefit from seeing a physician who specializes in opioid use during pregnancy, and that a specialist can help Riley manage her pain in a healthy way. Riley is receptive to Ashleigh's feedback because of built trust and how Ashleigh allows for open dialogue and questions. Riley asks where she can get help. Ashleigh and Riley engage in <u>shared decision-making</u> to determine the most appropriate next steps for Riley. Ashleigh gives Riley the phone number to a perinatal opioid use specialist at the county health department who can provide Riley with medication-assisted treatment. Ashleigh explains how the specialist will work in a non-judgmental, empathetic way to provide support to help her achieve and live a healthy life.

Riley and Ashleigh call the physician from Ashleigh's office and schedule a time for Riley, her mom, and Adam to meet at the physician's office. Ashleigh also provides Riley with informational <u>handouts</u> to share with her mom. The handouts explain how substance use disorder (SUD) treatment works and how families can support their loved ones with SUD. Riley leaves Ashleigh's office with a tangible next step and increased self-efficacy.



Alyssa and Michelle: A Home Visiting Postpartum Hemoglobin Check with a Field Nurse



Alyssa has been a home-visiting program staff member at the county health department for six years. This was her first job out of school, and she is passionate about supporting women to make healthy choices for themselves and their families by focusing on positive parenting and child development. Over the last six years, Alyssa has gained a clearer understanding of how people's environments and history shape their physical and mental health. Alyssa begins every new client session with a discussion about the client's home, relationships, and goals for the future. After establishing a relationship of trust, Alyssa also discusses the client's history of traumatic life events, and always employs an approach of traumatinformed care.

Michelle has been Alyssa's client throughout her pregnancy, and she gave birth to a healthy baby girl two days ago. Michelle has casually mentioned that prior to becoming pregnant, she misused substances, but has refrained from use throughout her pregnancy. Alyssa has a planned home visit with Michelle for continued support and to assess if Michelle is at any risk for return to use. Alyssa also knows that 50% of women are affected by postpartum anemia, which has been linked to postpartum health problems, including depression and fatigue.<sup>165</sup> Alyssa coordinates with a field nurse who can conduct a postpartum hemoglobin test for anemia. After test, Alyssa also decides to screen Michelle for postpartum depression. The postpartum time period brings massive shifts in hormone levels, and the typical newborn sleep schedule can leave new parents feeling exhausted and fatigued, often leading to anxiety and depression. Alyssa uses a screening tool called the Edinburgh Postnatal Depression Scale. This scale is widely used in both the prenatal and postnatal period and takes less than five minutes to complete. Michelle's score on the screen does not indicate that she is feeling depressed, but Alyssa makes a note to screen Michelle again at her next visit, knowing how quickly things can change.



Results from the Integrated 5Ps that Alyssa administered at the beginning of Michelle's pregnancy showed that Michelle screened negative to having used substances in the past 30 days. However, because Michelle casually mentioned having a history with SUD, Alyssa still monitors Michelle for changes. Alyssa asks Michelle about concerns in her life and learns that Michelle began to misuse substances again toward the very end of her pregnancy. Alyssa had established a safe and trusting relationship with Michelle throughout her pregnancy, so Michelle was comfortable being truthful with Alyssa about her recent increased substance use. Michelle shared that the stress of having a new child led her back to substance use. Alyssa knows that OUD is a chronic illness, and that relapses are to be expected. Alyssa can see that Michelle is exhausted, nervous, and emotional after giving birth to her daughter. Alyssa offers affirmations for all the wonderful things that Michelle is doing for her daughter, like breastfeeding and skin-to-skin contact, and shares that she is capable of sustained recovery from substance use.

Alyssa checks her referral list for a perinatal substance use specialist at the county health department and gives Michelle her name and information to follow up. Alyssa knows that this substance use specialist can make home visits and lets Michelle know that she will follow up by phone tomorrow. Michelle feels confident that she can refrain from substance use until then, and notes that her partner is also ensuring the safety of their daughter. When Alyssa leaves, Michelle is still feeling exhausted, but trusts that Alyssa will follow up the next day.



## References

<sup>1</sup> Blanco B, Volkow ND. "Management of opioid use disorder in the USA: present status and future directions." *Lancet*. 2019. 393: 1760-1772. Available at <u>https://doi.org/10.1016/S0140-6736(18)33078-2</u>. Accessed 11-10-2019.

<sup>4</sup> Wang J-C, Kapoor M, Goate AM. "The genetics of substance dependence." *Annu Rev Genomics Hum Genet*. 2012. 13:241-261. Available at <u>https://www.annualreviews.org/doi/10.1146/annurev-genom-090711-163844</u>. Accessed 6-26-2019.

<sup>5</sup> Bussing-Birks M. "Mental illness and substance abuse." *The Digest*. 2002. Issue 4. Available at <u>https://www.nber.org/digest/apr02/w8699.html</u>. Accessed 6-26-2019.

<sup>6</sup> Pelayo-Terán JM, Suárez-Pinilla P, Chadi N, *et al.* "Gene-environment interactions underlying the effect of cannabis in first episode psychosis." *Curr Pharm Des.* 2012. 18:5024-5035. Available at <u>https://doi.org/10.2174/138161212802884609</u>. Accessed 11-10-2019.

<sup>7</sup> Vowles KE, McEntee ML, Julnes PS, *et al.* "Rates of opioid misuse, abuse, and addiction in chronic pain: a systematic review and data synthesis." *Pain.* 2015. 156:569-576. Available at https://pubmed.ncbi.nlm.nih.gov/25785523/. Accessed 11-10-2019.

<sup>8</sup> Bjarnadóttir MV, Anderson DR, Prasad K, *et al.* "The value of shorter initial opioid prescriptions: a simulation evaluation." *Pharmacoecon Open*. 2020. 38:109-119. Available at <u>https://pubmed.ncbi.nlm.nih.gov/31631255/</u>. Accessed 6-22-2020.

<sup>9</sup> National Institute on Alcohol Abuse and Alcoholism. "Are Women More Vulnerable to Alcohol's Effects?" *Alcohol Alert*. 1999. Issue 46. Available at <a href="https://pubs.niaaa.nih.gov/publications/aa46.htm">https://pubs.niaaa.nih.gov/publications/aa46.htm</a>. Accessed 11-10-2019.

<sup>10</sup> CDC. Fact Sheet: Excessive Alcohol Use is a Risk to Women's Health. Available at

https://www.cdc.gov/alcohol/fact-sheets/womens-health.htm. Accessed 11-10-2019.

<sup>11</sup> Craft RM. Sex differences in drug- and non-drug induced analgesia. Life Sci. 2003;72(24):2675-2688.

<sup>12</sup> Smith H. S. (2009). Opioid metabolism. *Mayo Clinic proceedings*, *84*(7), 613–624. https://doi.org/10.1016/S0025-6196(11)60750-7

<sup>13</sup> Stevens SJ, Andrade RA, Ruiz BS. "Women and substance abuse: gender, age, and cultural considerations." *J Ethn Subst Abuse*. 2009. 8:341-358. Available at <u>https://www.ncbi.nlm.nih.gov/pubmed/25985074</u>. Accessed 11-10-2019.

<sup>14</sup> NIDA. 2020, January 22. Substance Use in Women DrugFacts. Retrieved from

https://www.drugabuse.gov/publications/drugfacts/substance-use-in-women on 2021, September 6

<sup>15</sup> NIDA. 2020, January 22. Substance Use in Women DrugFacts. Retrieved from

https://www.drugabuse.gov/publications/drugfacts/substance-use-in-women on 2021, September 6

<sup>16</sup> Greenfield SF, Back SE, Lawson K, Brady KT. Substance abuse in women. *Psychiatr Clin North Am*.2010;33(2):339-355. doi:10.1016/j.psc.2010.01.004

<sup>17</sup> Simoni-Wastila L. The Use of Abusable Prescription Drugs: The Role of Gender. Journal of Women's Health Gender Based Medicine. 2000 May 1;9(3):289-97.

18 Ibid.

<sup>19</sup> Back, S. E., Payne, R. L., Wahlquist, A. H., Carter, R. E., Stroud, Z., Haynes, L., Hillhouse, M., Brady, K. T., & Ling, W. (2011). Comparative profiles of men and women with opioid dependence: results from a national multisite effectiveness trial. The American journal of drug and alcohol abuse, 37(5), 313–323.

https://doi.org/10.3109/00952990.2011.596982

20 Ibid..

<sup>21</sup> Sumner, S. A., Mercado-Crespo, M. C., Spelke, M. B., Paulozzi, L., Sugerman, D. E., Hillis, S. D., & Stanley, C. (2016). Use of Naloxone by Emergency Medical Services during Opioid Drug Overdose Resuscitation
 Efforts. *Prehospital emergency care : official journal of the National Association of EMS Physicians and the National Association of State EMS Directors*, 20(2), 220–225. <a href="https://doi.org/10.3109/10903127.2015.1076096">https://doi.org/10.3109/10903127.2015.1076096</a>



<sup>&</sup>lt;sup>2</sup> National Institute on Drug Abuse. "Opioid Overdose Crisis." Available at <u>https://www.drugabuse.gov/drugs-abuse/opioids/opioid-overdose-crisis</u>. Accessed 6-26-2019.

<sup>&</sup>lt;sup>3</sup> National Library of Medicine. "Opioid Addiction." Available at <u>https://ghr.nlm.nih.gov/condition/opioid-addiction</u>. Accessed 6-26-2019.

Text box citation: NIDA. 2021, April 13. Sex and Gender Differences in Substance Use.

https://www.drugabuse.gov/publications/research-reports/substance-use-in-women/sex-gender-differences-in-substance-use on 2021, August 28. Accessed 8-28-21.

<sup>22</sup> Office of Women's Health. "Final Report: Opioid Use, Misuse, and Overdose in Women 2017." Available at <u>https://owh-wh-d9-prod.s3.amazonaws.com/s3fs-public/documents/final-report-opioid-508.pdf</u>. Accessed 6-26-2019.

<sup>23</sup> Ibid.

<sup>24</sup> Khan S, Okuda M, Hasin DS, *et al.* "Gender differences in lifetime alcohol dependence: results from the national epidemiologic survey on alcohol and related conditions." *Alcohol Clin Exp Res.* 2013. 37:1696–1705. Available at <u>https://pubmed.ncbi.nlm.nih.gov/23763329/</u>. Accessed 7-06-2020.

<sup>25</sup> CDC. "Pregnancy Data and Statistics." Available at <u>https://www.cdc.gov/pregnancy/opioids/data.html</u>. Accessed 3-22-2020/.

<sup>26</sup> Patrick SW, Schumacher RE, Benneyworth BD, *et al.* "Neonatal abstinence syndrome and associated health care expenditures: United States: 2000–2009." *JAMA*. 2012. 307:1934–1940. Available at https://pubmed.ncbi.nlm.nih.gov/22546608/. Accessed 7-06-2020.

<sup>27</sup> Terplan M, Smith EJ, Kozloski MJ, *et al.* "Methamphetamine use among pregnant women." *Obstet Gynecol.* 2009. 113:1285-1291. Available at <u>https://www.ncbi.nlm.nih.gov/pubmed/19461424</u>. Accessed 11-10-2019.

<sup>28</sup> American Society of Addiction Medicine. "Opioid Addiction 2016 Facts & Figures." Available at <u>https://www.asam.org/docs/default-source/advocacy/opioid-addiction-disease-facts-figures.pdf</u>. Accessed 6-26-2019.

<sup>29</sup>Bussing-Birks, M. "Mental Illness and Substance Abuse." *The Digest*. 2002. Issue 4. Available at <u>https://www.nber.org/digest/apr02/w8699.html</u>. Accessed 11-13-19.

<sup>30</sup> Lotzin A, Grundmann J, Hiller P, *et al.* "Profiles of childhood trauma in women with substance use disorders and comorbid posttraumatic stress disorders." *Front Psychiatry*. 2019. 10:674. Available at

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6813657/. Accessed 5-28-2021.

<sup>31</sup> Kelly TM, Daley DC. "Integrated treatment of substance use and psychiatric disorders." *Soc Work Public Health*.
 2013. 28,3-4: 388-406. Available at <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3753025/</u>. Accessed 7-5-2020.
 <sup>32</sup> Ibid.

<sup>33</sup> CDC. "Preventing Adverse Childhood Experiences." Available at

https://www.cdc.gov/violenceprevention/aces/fastfact.html?CDC\_AA\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fv iolenceprevention%2Facestudy%2Ffastfact.html. Accessed 6.15.2021.

<sup>34</sup> Felitti VJ, Anda RF, Noredenberg D, *et al.* "Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults." *Am J Prev Med.* 1998. 14: 245-258. Available at

https://doi.org/10.1016/S0749-3797(98)00017-8. Accessed 11-10-2019. <sup>35</sup> Shonkoff JP, Garner AS, *et al.* "The lifelong effects of early childhood adversity and toxic stress." *J Pediatr.* 2012.

129:e232-2246. Available at <a href="https://doi.org/10.1542/peds.2011-2663">https://doi.org/10.1542/peds.2011-2663</a>. Accessed 5-28-2021.

<sup>36</sup> HHS. "New HRSA Data Show One in Three US Children Have Suffered an Adverse Childhood Experience." Available at <u>https://www.hrsa.gov/about/news/press-releases/hrsa-data-national-survey-children-health</u>. Accessed 2-4-2020.

<sup>37</sup> Strine TW, Dube SR, Edwards VJ, *et al.* "Associations between adverse childhood experiences, psychological distress, and adult alcohol problems." *Am J Health Behav.* 2012. 36:408-423. Available at <u>https://doi.org/10.5993/AJHB.36.3.11</u>. Accessed 11-10-2019.

<sup>38</sup> Anda RF, Brown DW, Felitti VJ, *et al.* "Adverse childhood experiences and prescription drug use in a cohort study of adult HMO patients." *BMC Public Health.* 2008. 4:198. Available at <u>https://doi.org/10.1186/1471-2458-8-198</u>. Accessed 11-10-2019.

<sup>39</sup> Dube SR, Felitti VJ, Dong M, *et al.* "Childhood abuse, neglect and household dysfunction and the risk of illicit drug use: The Adverse Childhood Experience Study." *J Pediatr.* 2003. 111(3):564–572. Available at <u>https://doi.org/10.1542/peds.111.3.564</u>. Accessed 11-10-2019.



<sup>40</sup> New HRSA Data Show One in Three US Children Have Suffered an Adverse Childhood Experience," Available at <u>https://www.hrsa.gov/about/news/press-releases/hrsa-data-national-survey-children-health</u>. Accessed 2-4-2020.

<sup>41</sup> Leitch L. "Action steps using ACEs and trauma-informed care: a resilience model." *Health Justice*. 2017. 5:5. Available at <u>https://healthandjusticejournal.biomedcentral.com/articles/10.1186/s40352-017-0050-5</u>. Accessed 11-10-2019.

<sup>42</sup> Prevention Institute. "Adverse Community Experiences and Resilience: A framework for Addressing and Preventing Community Trauma" Available at

https://www.preventioninstitute.org/sites/default/files/publications/Adverse%20Community%20Experiences%20 and%20Resilience.pdf. Accessed 7-17-2019.

 <sup>43</sup> Prevention Institute. "Minimizing the Impact of Adverse Childhood Experiences through a Focus on Adverse Community Experiences." Available at <u>https://www.preventioninstitute.org/unity/publications/minimizing-impact-adverse-childhood-experiences-through-focus-adverse-community</u>. Accessed 7-17-2019.
 <sup>44</sup> Ibid.

<sup>45</sup> Schofield TJ, Donnellan MB, Merrick MT, *et al.* "Intergenerational Continuity in Adverse Childhood Experiences and Rural Community Environments." *Am J Public Health*. 2018. 108:1148–1152. Available at https://ajph.aphapublications.org/doi/10.2105/AJPH.2018.304598. Accessed 11-10-2019.

<sup>46</sup> Le-Scherban F, Wang X, Boyle-Steed KH, et al. "Intergenerational association of parent adverse childhood experiences and child health outcomes." *Pediatrics*. 2018. 141: 1-9. Available at <u>http://Doi.org/10.1542/peds.2017-4274. Accessed 11-10-2019</u>.

<sup>47</sup> Grigsby TJ, Howard JT. "Prescription opioid misuse and comorbid substance use: Past 30-day prevalence, correlates and co-occurring behavioral indicators in the 2016 National Survey on Drug Use and Health." *Am J Addict*. 2019. 28:111-118. Available at <a href="https://www.ncbi.nlm.nih.gov/pubmed/30701620">https://www.ncbi.nlm.nih.gov/pubmed/30701620</a>. Accessed 5-8-2020.
 <sup>48</sup> Reddy UM, Davis JM, Ren Z, et al. "Opioid use in pregnancy, Neonatal Abstinence Syndrome, and Childhood Outcomes: executive summary of a joint workshop by the Eunice Kennedy Shriver National Institute of Child Health

and Human Development, American College of Obstetricians and Gynecologists, American Academy of Pediatrics, Society for Maternal-Fetal Medicine, Centers for Disease Control and Prevention, and the March of Dimes Foundation." *Obstet Gynecol*. 2017. 130:10–28. Available at <u>https://www.ncbi.nlm.nih.gov/pubmed/28594753</u>. Accessed 11-10-19.

<sup>49</sup> Substance Abuse and Mental Health Services Administration. "A Collaborative Approach to the Treatment of Pregnant Women with Opioid Use Disorders." Available at

https://ncsacw.samhsa.gov/files/Collaborative Approach 508.pdf. Accessed 5-25-2021.

<sup>50</sup> Mayo Clinic. "Drug addiction (substance use disorder)." Available at <u>https://www.mayoclinic.org/diseases-conditions/drug-addiction/symptoms-causes/syc-20365112</u>. Accessed 8-6-2019.

<sup>51</sup> Substance Abuse and Mental Health Services Administration. "A Collaborative Approach to the Treatment of Pregnant Women with Opioid Use Disorders." Available at

https://ncsacw.samhsa.gov/files/Collaborative Approach 508.pdf. Accessed 5-25-2021.

<sup>52</sup> World Health Organization. "Information Sheet on Opioid Overdose." Available at

https://www.who.int/substance\_abuse/information-sheet/en/. Accessed 10-19-2020.

<sup>53</sup> Skywood Recovery. "Dangers of combining marijuana and oxycodone." Available at

https://skywoodrecovery.com/dangers-of-combining-marijuana-and-oxycodone/. Accessed 8-6-2019.

<sup>54</sup> Ellis MS, Kasper ZA, Cicero TJ. "Twin epidemics: The surging rise of methamphetamine use in chronic opioid users." *Drug Alcohol Depend*. 2018. 193: 14-20. Available at <u>https://www.ncbi.nlm.nih.gov/pubmed/30326396</u>. Accessed 11-10-19.

<sup>55</sup> The Treehouse. "The risks of using heroin with methamphetamine." Available at <u>https://www.treehouserehab.org/heroin-meth/</u>. Accessed 9-6-2019.

<sup>56</sup> Pitt Public Health Center for Public Health Practice. "Law in Public Health Practice. Changing the Culture: Pregnant Women Impacted by the Opioid Crisis." Available at

http://cphp.pitt.edu/images/HPM 2133 White Paper-final.pdf. Accessed 7-16-2019.



<sup>57</sup> Haight Sc, Ko JY, Tong VT, *et al.* "Opioid use disorder documented at delivery hospitalization – United States,
 1999 - 2014." *MMWR Morb Mortal Wkly Rep.* 2018. 67:845 – 849. Available at

http://dx.doi.org/10.15585/mmwr.mm6731a1. Accessed 7-16-2019.

<sup>58</sup> Pitt Public Health Center for Public Health Practice. "Law in Public Health Practice. Changing the Culture: Pregnant Women Impacted by the Opioid Crisis." Available at

http://cphp.pitt.edu/images/HPM 2133 White Paper-final.pdf. Accessed 7-16-2019.

<sup>59</sup> Terplan M, Kennedy-Hendricks A, Chisolm MS. "Prenatal Substance Use: Exploring Assumptions of Maternal Unfitness. Substance abuse: research and treatment." *Subst Abuse*. 2015. 9: 1–4. Available at https://doi.org/10.4137/SART.S23328. Accessed 5-8-2020.

<sup>60</sup> Faherty LJ, Kranz AM, Russell-Fritch J, et al. "Association of Punitive and Reporting State Policies Related to Substance Use in Pregnancy with Rates of Neonatal Abstinence Syndrome." *JAMA Netw Open*. 2019. 2(11):e1914078. Available at <u>https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2755304</u>. Accessed

5-8-2020.

<sup>61</sup> Forman E. "Afraid to treat pregnant women, doctors drop addicted patients at a vulnerable time." *Side Effects*. August 1, 2017. Available at <u>https://www.sideeffectspublicmedia.org/post/afraid-treat-pregnant-women-doctors-drop-addicted-patients-vulnerable-time</u>. Accessed 7-16-2019.

<sup>62</sup> ASTHO. "ASTHO*Brief*: Stigma Reinforces Barriers to Care for Pregnant and Postpartum Women with Substance Use Disorder." 2019. Available at <u>https://www.astho.org/ASTHOBriefs/Stigma-Reinforces-Barriers-to-Care-for-Pregnant-and-Postpartum-Women-with-Substance-Use-Disorder/</u>. Accessed 6-12-2020.

<sup>63</sup> Harm Reduction Coalition. "Principles of Harm Reduction." Available at <u>https://harmreduction.org/about-us/principles-of-harm-reduction/</u>. Accessed 6-23-2020.

<sup>64</sup> Harm Reduction International." What is harm reduction?" Available at <u>https://www.hri.global/what-is-harm-reduction</u>. Accessed 3-23-2020.

<sup>65</sup> ASTHO. "Innovative Approaches for Overdose Prevention." 2019. Available at

https://www.astho.org/StatePublicHealth/Innovative-Approaches-for-Overdose-Prevention/03-20-19/. Accessed 6-12-2020.

<sup>66</sup> National Association of Social Workers. "Social Justice." Available at

https://www.socialworkers.org/Advocacy/Social-Justice. Accessed 6-12-2020.

<sup>67</sup> Harm Reduction Coalition. "Principles of Harm Reduction." Available at <u>https://harmreduction.org/about-us/principles-of-harm-reduction/</u>. Accessed 6-23-2020.

<sup>68</sup> Harm Reduction International. "What is harm reduction?" Available at <u>https://www.hri.global/what-is-harm-reduction</u>. Accessed 3-23-2020.

<sup>69</sup> American College of Obstetricians and Gynecologists. "Leading Experts in Women's Health Care, Pediatrics & Addiction Medicine: 'Pregnant Women with Substance Use Disorders Need Health Care, Not Incarceration.'" 2018. Available at <u>https://www.acog.org/news/news-releases/2018/01/pregnant-women-with-substance-use-disorders-need-health-care-not-incarceration</u>. Accessed 7-16-2019.

<sup>70</sup> American College of Obstetricians and Gynecologists. "Committee Opinion No. 524: Opioid Abuse, Dependence and Addiction in Pregnancy." *Obstet Gyencol*. 2012. 119:1070-6. Available at

https://doi.org/10.1097/AOG.0b013e318256496e. Accessed 11-10-2019.

<sup>71</sup> Lander L, Howsare J, Byrne M. "The Impact of Substance Use Disorders on Families and Children: From Theory to Practice." *Soc Work Public Health*. 2013; 28(0): 194–205. Available at

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3725219/. Accessed 11-10-2019.

72 Ibid.

<sup>73</sup> American College of Obstetricians and Gynecologists. "Committee Opinion No. 524: Opioid Abuse, Dependence and Addiction in Pregnancy." *Obstet Gyencol*. 2012. 119:1070-6. Available at

https://doi.org/10.1097/AOG.0b013e318256496e. Accessed 11-10-2019.

<sup>74</sup> Substance Abuse and Mental Health Services Administration. "Collaborative Approach to the Treatment of Pregnant Women with Opioid Use Disorders." Available at

https://ncsacw.samhsa.gov/files/Collaborative Approach 508.pdf. Accessed 6-23-2020.



<sup>75</sup> American College of Obstetricians and Gynecologists. "Committee Opinion No. 524: Opioid Abuse, Dependence and Addiction in Pregnancy." *Obstet Gyencol*. 2012. 119:1070-6.

https://doi.org/10.1097/AOG.0b013e318256496e. Accessed 11-10-2019.

<sup>76</sup> Harm Reduction International. "What is harm reduction?" Available at <u>https://www.hri.global/what-is-harm-reduction</u>. Accessed 3-23-2020.

<sup>77</sup> American College of Obstetricians and Gynecologists. "Committee Opinion No. 524: Opioid Use and Opioid Use Disorder in Pregnancy." 2017. 130:e81–94. Available at <u>https://www.acog.org/clinical/clinical-</u>

guidance/committee-opinion/articles/2017/08/opioid-use-and-opioid-use-disorder-in-pregnancy. Accessed 11-10-2019.

<sup>78</sup> Substance Abuse and Mental Health Services Administration. "Clinical Guidance for Treating Pregnant and Parenting Women with Opioid Use Disorder and Their Infants." Available at

<u>https://store.samhsa.gov/product/Clinical-Guidance-for-Treating-Pregnant-and-Parenting-Women-With-Opioid-Use-Disorder-and-Their-Infants/SMA18-5054</u>. Accessed 1-10-2019.

79 Ibid.

<sup>80</sup> American College of Obstetricians and Gynecologists. "Committee Opinion No. 524: Opioid Use and Opioid Use Disorder in Pregnancy." 2017. 130:e81–94. Available at <u>https://www.acog.org/clinical/clinical-</u>

guidance/committee-opinion/articles/2017/08/opioid-use-and-opioid-use-disorder-in-pregnancy. Accessed 11-10-2019.

<sup>81</sup> ASTHO. "Increasing State Health Agency Capacity to Improve 17P Utilization." 2015. Available at <u>http://www.astho.org/Maternal-and-Child-Health/ASTHO-17P-Issue-Brief</u>. Accessed 10-29-2019.

<sup>82</sup> Substance Abuse and Mental Health Services Administration. "Clinical Guidance for Treating Pregnant and Parenting Women with Opioid Use Disorder and Their Infants." 2018. Available at

https://store.samhsa.gov/product/Clinical-Guidance-for-Treating-Pregnant-and-Parenting-Women-With-Opioid-Use-Disorder-and-Their-Infants/SMA18-5054. Accessed 1-10-2019.

<sup>83</sup> North Carolina Pregnancy & Opioid Exposure Project. "Medication Management." 2018. Available at <u>https://ncpoep.org/guidance-document/north-carolina-guidelines-medication-assisted-treatment-mat-in-pregnancy/medication-management/</u>. Accessed 8-6-2020.

<sup>84</sup> American College of Obstetricians and Gynecologists. "Committee Opinion No. 711: Opioid Use and Opioid Use Disorder in Pregnancy." 2017. 130:e81-94. Available at <u>https://www.acog.org/clinical/clinical-</u>

guidance/committee-opinion/articles/2017/08/opioid-use-and-opioid-use-disorder-in-pregnancy. Accessed 8-6-2020.

<sup>85</sup> California Correctional Health Care Services. "CCHCS Care Guide: MAT for Opioid Use Disorder in Pregnancy." October 2019. Available at <u>https://cchcs.ca.gov/wp-content/uploads/sites/60/CG/MAT-OUD-Pregnancy-CG.pdf</u>. Accessed 8-6-2020.

<sup>86</sup> American College of Obstetricians and Gynecologists. "Medication-assisted Treatment Remains the Recommended Therapy for Pregnant Women." July 26, 2017. Available at <u>https://www.acog.org/news/news-releases/2017/07/medication-assisted-treatment-remains-the-recommended-therapy-for-pregnant-women</u>. Accessed 1-28-2020.

<sup>87</sup> Cleveland L. "Breastfeeding recommendations for women who receive medication-assisted treatment for opioid use disorders." *J Obstet Gynecol Neonatal Nurs*. 2016. 45: 574–576. Available at

https://www.jognn.org/article/S0884-2175(16)30208-8/pdf. Accessed 1-28-2020.

<sup>88</sup> HHS Office on Women's Health. "Making the Decision to Breastfeed." 2019. Available at

https://www.womenshealth.gov/breastfeeding/making-decision-breastfeed. Accessed 1-23-2020.

<sup>89</sup>Turkheimer L, Valea F, Simcox K, *et al.* "Effects of Breastfeeding on NAS Symptom Severity, Infant Pharmacologic Use, and Length of Hospital Stay [120]." *Obstetrics & Gynecology.* 2020. 135: 159S-160S. Available at

https://journals.lww.com/greenjournal/Abstract/2020/05001/Effects\_of\_Breastfeeding\_on\_NAS\_Symptom\_Severi ty,.563.aspx. Accessed 8-13-2021.

90 Ibid.

<sup>91</sup> Scatliffe N, Casavant S, Vittner D, Cong X. "Oxytocin and early parent-infant interactions: a systematic review." *Int J Nurs Sci.* 2019. 6:445-453. Available at doi:10.1016/j.ijnss.2019.09.009.



<sup>92</sup> ASTHO. "Game Changer: Pennsylvania's Response to the Opioid Crisis." 2019. Available at

https://www.astho.org/generickey/GenericKeyDetails.aspx?contentid=21270&folderid=5158&catid=7252. Accessed 2-3-2020.

<sup>93</sup> ASTHO. "State Approaches for Promoting Family-Centered Care for Pregnant and Postpartum Women with Substance Use Disorders." 2019. Available at https://www.astho.org/ASTHOBriefs/State-Approaches-Promoting-Family-Centered-Care-Pregnant-Postpartum-Women-with-SUD/. Accessed 12-10-2019.

<sup>94</sup> Smith J. Pennsylvania Department of Drug and Alcohol Programs, "Pennsylvania's Response to the Opioid Epidemic." Available at https://www.pahouse.com/files/Documents/2018-10-

19 021236 PA%20Response%20to%20the%20Opioid%20Epidemic updates.pdf. Accessed 2-1-2020.

<sup>95</sup> O'Brien J, Sadwith T, Croze C, et al. "Review of State Strategies to Expand Medication Assisted Treatment." Available at https://www.tacinc.org/resource/state-strategies-to-expand-medication-assisted-treatment/. Accessed 2-1-2020.

<sup>96</sup> Vermont Department of Health. "More Vermonters are Receiving Needed Medication Assisted Treatment." 2019. Available at

https://www.healthvermont.gov/sites/default/files/documents/pdf/ADAP\_Medication%20Assisted%20Treatment %20for%20Opioid%20Use%20Disorder%20Trends.pdf. Accessed 1-29-2020.

<sup>97</sup> ASTHO. "Medication Assisted Treatment Program for Opioid Addiction." Available at https://www.astho.org/Health-Systems-Transformation/Medicaid-and-Public-Health-Partnerships/Case-Studies/Vermont-MAT-Program-for-Opioid-Addiction/. Accessed 2-1-2020.

<sup>98</sup> Vermont Department of Health. "More Vermonters are Receiving Needed Medication Assisted Treatment." 2019. Available at

https://www.healthvermont.gov/sites/default/files/documents/pdf/ADAP\_Medication%20Assisted%20Treatment %20for%20Opioid%20Use%20Disorder%20Trends.pdf. Accessed 1-29-2020.

<sup>99</sup> ASTHO and the de Beaumont Foundation. "Medication Assisted Treatment Program for Opioid Addiction." Available at https://www.astho.org/Health-Systems-Transformation/Medicaid-and-Public-Health-

Partnerships/Case-Studies/Vermont-MAT-Program-for-Opioid-Addiction/. Accessed 2-1-2020.

<sup>100</sup> McQueen K, Murphy-Oikonen J. "Neonatal abstinence syndrome." New Engl J Med. 2016. 375: 2468-2479. Available at https://www.nejm.org/doi/full/10.1056/NEJMra1600879. Accessed 6-26- 2019.

<sup>101</sup> CDC. "About Opioid Use During Pregnancy." 2021. Available at

https://www.cdc.gov/pregnancy/opioids/basics.html. Accessed 6-26-2019.

<sup>102</sup> HRSA. "HRSA's Home Visiting Program: Supporting Families Impacted by Opioid Use and Neonatal Abstinence Syndrome" 2018. Available at

https://mchb.hrsa.gov/sites/default/files/mchb/MaternalChildHealthInitiatives/HomeVisiting/MIECHV-Opioid-NAS-Resource.pdf. Accessed 6-26-2019.

<sup>103</sup> National Institute on Drug Abuse. "Dramatic Increases in Maternal Opioid Use and Neonatal Abstinence Syndrome." 2019. Available at https://archives.drugabuse.gov/trends-statistics/dramatic-increases-in-maternalopioid-use-neonatal-abstinence-syndrome. Accessed 1-9-2020.

<sup>104</sup> Cleveland L. "Breastfeeding Recommendations for Women Who Receive Medication-Assisted Treatment for Opioid Use Disorders" J Obstet Gynecol Neonatal Nurs. 2016. 45: 574-576. Available at

https://www.jognn.org/article/S0884-2175(16)30208-8/pdf. Accessed 1-28-2020.

<sup>105</sup> Reynen D, Yamada E. California Department of Public Health. "Neonatal Abstinence Syndrome." PowerPoint presentation. Jan. 9, 2019. Available at https://www.astho.org/globalassets/pdf/neonatal-abstinence-syndromecdph.pdf. Accessed April 21, 2022.

<sup>106</sup>Addiction Free CA. "Mother&Baby Substance Exposure Initiative." 2020. Available at https://addictionfreeca.org/project/pregnant-and-parenting-women. Accessed 4-4-2020. <sup>107</sup> Ibid.

<sup>108</sup> Colorado Hospital Substance Exposed Newborns Collaborative. "Leading Practice Change." Available at https://www.chosencollaborative.org/background.html. Accessed 3-19-2020.



<sup>109</sup> National Institute for Children's Health Quality. "A Mother-Centered Approach to Treating Neonatal Abstinence Syndrome." Available at <u>https://www.nichq.org/insight/mother-centered-approach-treating-neonatal-abstinence-syndrome</u>. Accessed 3-19-2020.

<sup>110</sup> Grossman MR, Lipshaw MJ, Osborn RR, *et al.* "A novel approach to assessing infants with neonatal abstinence syndrome." *Hosp Pediatr*. 2018. 8: 1-6. Available at <u>https://www.ncbi.nlm.nih.gov/pubmed/29263121</u>. Accessed 5-8-2020.

<sup>111</sup> ASTHO. "Innovative Approaches to Treating Neonatal Abstinence Syndrome." 2018. Available at <u>https://www.astho.org/StatePublicHealth/Innovative-Approaches-to-Treating-Neonatal-Abstinence-Syndrome/7-31-18/</u>. Accessed 3-19-2020.

<sup>112</sup> Dartmouth Geisel School of Medicine. "AAMC Award for Geisel and CHaD Project to Improve Care of Opioid-Exposed Newborns." 2015. Available at <u>https://geiselmed.dartmouth.edu/news/2015/aamc-award-for-geisel-and-chad-project-to-improve-care-of-opioid-exposed-newborns/</u>. Accessed 3-20-2020.

<sup>113</sup> ASTHO. "Innovative Approaches to Treating Neonatal Abstinence Syndrome." 2018. Available at <u>https://www.astho.org/StatePublicHealth/Innovative-Approaches-to-Treating-Neonatal-Abstinence-Syndrome/7-31-18/</u>. Accessed 3-19-2020.

<sup>114</sup> American College of Obstetricians and Gynecologists. "Committee Opinion No. 711: Opioid Use and Opioid Use Disorder in Pregnancy." *Obstet Gynecol*. 2017. 130:e81-94. Available at <u>https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2017/08/opioid-use-and-opioid-use-disorder-in-pregnancy</u>. Accessed 3-2-2020.

<sup>115</sup> American College of Obstetricians and Gynecologists. "Committee Opinion No. 736: Optimizing Postpartum Care." *Obstet Gynecol*. 2018. 131: e140-150. Available at <u>https://www.acog.org/clinical/clinical-</u>

guidance/committee-opinion/articles/2018/05/optimizing-postpartum-care. Accessed 6-26-2019.

<sup>116</sup> Bennett WL, Chang HY, Levine DM, *et al.* "Utilization of primary and obstetric care after medically complicated pregnancies: an analysis of medical claims data." *J Gen Intern Med.* 2014. 29: 636-645. Available at https://www.ncbi.nlm.nih.gov/pubmed/24474651. Accessed 11-10-2019.

<sup>117</sup> Substance Abuse and Mental Health Services Administration. "Screening, Brief Intervention and Referral to Treatment (SBIRT) in Behavioral Healthcare." 2011. Available at

https://www.samhsa.gov/sites/default/files/sbirtwhitepaper 0.pdf. Accessed at 6-26-2019.

<sup>118</sup> USDA Food and Nutrition Service. "Substance Use Prevention: Screening, Education, and Referral Resource Guide for Local WIC Agencies." 2013. Available at

https://wicworks.fns.usda.gov/sites/default/files/media/document/ResourceManual%20rev%204-17-18.pdf. Accessed 6-26-2019.

<sup>119</sup> HRSA. "HRSA's Home Visiting Program: Supporting Families Impacted by Opioid Use and Neonatal Abstinence Syndrome." 2018. Available at

https://mchb.hrsa.gov/sites/default/files/mchb/MaternalChildHealthInitiatives/HomeVisiting/MIECHV-Opioid-NAS-Resource.pdf. Accessed 6-26-2019.

<sup>120</sup> Wachino V. "Maternal Depression Screening and Treatment: A Critical Role for Medicaid in the Care of Mothers and Children." 2016. Centers for Medicare and Medicaid Services. Available at <u>https://www.medicaid.gov/federal-</u> <u>policy-guidance/downloads/cib051116.pdf</u>. Accessed 6-26-2019.

<sup>121</sup> Novotney J, Maurer D. "Is the Edinburgh Postnatal Depression Scale an effective way to screen for postpartum depression?" *Evidence-Based Practice*. 2017. 20: E7–E8. Available at

https://journals.lww.com/ebp/Abstract/2017/07000/ls\_the\_Edinburgh\_Postnatal\_Depression\_Scale\_an.22.aspx. Accessed 11-10-2019.

<sup>122</sup> Substance Abuse and Mental Health Services Administration. "SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach 2014." Available at <u>https://store.samhsa.gov/system/files/sma14-4884.pdf</u>. Accessed 6-26-2019.

<sup>123</sup> Nursing Times. "Trauma-informed care in response to adverse childhood experiences." Available at <u>https://www.nursingtimes.net/roles/nurse-educators/trauma-informed-care-in-response-to-adverse-childhood-experiences/7024813.article?blocktitle=The-clinical-team-recommends...&contentID=28251. Accessed 6-26-2019.</u>



<sup>124</sup> USDA Food and Nutrition Service. "About WIC: WIC at a glance." Available at https://www.fns.usda.gov/wic/about-wic-wic-glance. Accessed 6-26-2019.

<sup>125</sup> Hughes M, Tucker W. "Poverty as an adverse childhood experience." *N C Med J*. 2018. 79: 124-126. Available at https://doi.org/10.18043/ncm.79.2.124. Accessed 11-10-2019.

<sup>126</sup> Wade R. "The impact of poverty and adverse childhood events on child health." Available at <u>https://www.aap.org/en-us/Documents/AAPCommunityPediatricsWade2016.pdf</u>. PowerPoint Presentation. Accessed 6-27-2019.

<sup>127</sup> Substance Abuse and Mental Health Services Administration. "SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach." 2014. Available at <u>https://store.samhsa.gov/system/files/sma14-4884.pdf</u>. Accessed 6-26-2019.

<sup>128</sup> Ibid.

<sup>129</sup> Jarlenski, M., Hogan, C., Bogen, D. et al. "Characterization of U.S. State Laws Requiring Health Care Provider Reporting of Perinatal Substance Use." *Women's health issues : official publication of the Jacobs Institute of Women's Health*. 2017. 27,3: 264-270. Available at <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5435508/</u>. Accessed 7-05-2020.

<sup>130</sup> Guttmacher Institute. "Substance Use During Pregnancy." 2021. Available at:

https://www.guttmacher.org/state-policy/explore/substance-use-during-pregnancy. Accessed 6-16-2021. <sup>131</sup> Jarlenski, M., Hogan, C., Bogen, D. et al. "Characterization of U.S. State Laws Requiring Health Care Provider Reporting of Perinatal Substance Use." *Women's health issues : official publication of the Jacobs Institute of Women's Health*. 2017. 27,3: 264-270. Available at <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5435508/</u>. Accessed 7-05-2020.

<sup>132</sup> Ibid.

<sup>133</sup> Guttmacher Institute. "Substance Use During Pregnancy." 2021. Available at:

https://www.guttmacher.org/state-policy/explore/substance-use-during-pregnancy. Accessed 6-16-2021.

<sup>134</sup> Child Welfare Information Gateway. (2019). About CAPTA: A legislative history. Washington, DC: U.S. Department of Health and Human Services, Children's Bureau. Available at

https://www.childwelfare.gov/pubpdfs/about.pdf. Accessed 9-17-2021.

<sup>135</sup> National Advocates for Pregnant Women. "Understanding CAPTA and State Obligations." 2020. Available at <u>https://www.nationaladvocatesforpregnantwomen.org/understanding-capta-and-state-obligations/</u>. Accessed 9-17-2021.

<sup>136</sup> Ibid.

<sup>137</sup> Ibid.

<sup>138</sup> Guttmacher Institute. "Substance Use During Pregnancy." 2021. Available at:

https://www.guttmacher.org/state-policy/explore/substance-use-during-pregnancy. Accessed 6-16-2021.

<sup>139</sup> California Penal Code. CAL. PENAL CODE § 11165.13 (West 2019).

<sup>140</sup> California Health and Safety Code. CAL. HEALTH & SAFETY CODE § 123605 (West 2019).

<sup>141</sup> Guttmacher Institute. "Substance Use During Pregnancy." 2015. Available at:

https://www.guttmacher.org/state-policy/explore/substance-use-during-pregnancy. Accessed 4-24-2020. <sup>142</sup> California Penal Code. CAL. PENAL CODE § 11165.13 (West 2019).

<sup>143</sup> California Health and Safety Code. CAL. HEALTH & SAFETY CODE § 11998.1 (West 2019).

<sup>144</sup> California Health and Safety Code. CAL. HEALTH & SAFETY CODE § 11757.59 (West 2019).

<sup>145</sup> National Institute on Drug Abuse. "Substance Use in Women." 2020. Available at

https://www.drugabuse.gov/publications/drugfacts/substance-use-in-women. Accessed 6-26-2019.

<sup>146</sup> World Health Organization. "Information Sheet on Opioid Overdose." 2020. Available at

https://www.who.int/substance\_abuse/information-sheet/en/. Accessed 10-19-2020. <sup>147</sup> Ibid.

<sup>148</sup> The Network for Public Health Law. "Overdose Prevention and Harm Reduction 50-State Survey:

Characteristics of Statewide Naloxone Distribution Mechanisms." 2020. Available at

https://www.networkforphl.org/wp-content/uploads/2020/04/Characteristics-of-Statewide-Naloxone-Distribution-Mechanisms.pdf. Accessed 4-24-2020.



<sup>149</sup>National Conference of State Legislatures "Behavioral Health and COVID-19 Policy Snapshot." 2020. Available at <u>https://www.ncsl.org/Portals/1/Documents/Health/COVID-Behavioral-Health snapshot 35149.pdf</u>. Accessed 8-13.21.

<sup>150</sup> California Department of Public Health. "California's Approach to the Opioid Epidemic." Available at <u>https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/SACB/Pages/Opioids.aspx</u>. Accessed 11-10-2019.

<sup>151</sup> CDC. "CDC health disparities and inequalities report: United States, 2011." *MMWR*. 2011. 60:1-109. Available at <u>http://www.cdc.gov/mmwr/pdf/other/su6001.pdf</u>. Accessed 6-26-2019.

<sup>152</sup> Boardman J, Finch B, Ellison, *et al.* "Neighborhood disadvantage, stress, and drug use among adults." *J Health Soc Behav*. 20011.42: 151. Available at <u>https://www.jstor.org/stable/3090175</u>. Accessed 11-10-2019.

<sup>153</sup> Grant JD, Scherrer JF, Lynskey MT, *et al.* "Associations of alcohol, nicotine, cannabis and drug use/dependence with educational attainment: evidence from cotwin-control analyses." *Alcohol Clin Exp Res.* 2012. 36:1412- 1420. Available at https://doi.org/ 10.1111/j.1530-0277.2012.01752.x. Accessed 11-10-2019.

<sup>154</sup> Chatterji P. "Illicit drug use and educational attainment." *Health Econ*. 2006. 15: 489-511. Available at <u>https://doi.org/10.1002/hec.1085</u>. Accessed 11-10-2019.

<sup>155</sup> Fothergill KE, Ensminger ME, Green KM, *et al.* "The impact of early school behavior and educational achievement on adult drug use disorders: a prospective study." *Drug Alcohol Depend*. 2008. 92:191–199. Available at <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2393553/</u>. Accessed 7-21-2020.
 <sup>156</sup> Ibid.

<sup>157</sup> Douglas-Hall A, Chau M. "Parents' Low Education Leads to Low Income, Despite Full-Time Employment." 2007. National Center for Children in Poverty. Available at <u>http://www.nccp.org/publications/pub\_786.html#2</u>. Accessed 11-10-2019.

<sup>158</sup> Zoorob M, Salemi J. "Bowling alone, dying together: The role of social capital in mitigating the drug overdose epidemic in the United States." *Drug Alcohol Depend.* 2017. 173: 1-9. Available at <u>https://pubmed.ncbi.nlm.nih.gov/28182980/</u>. Accessed 7-17-2020.

<sup>159</sup> Urban Institute. "Comprehensive Opioid Abuse Program Assessment: Examining the Scope and Impact of America's Opioid Crisis Interim Report to Congress." 2019. Available at

https://www.urban.org/sites/default/files/publication/101990/comprehensive-opioid-abuse-program-assessment.pdf. Accessed 8-14-20.

<sup>160</sup> Ibid.

<sup>161</sup> HHS. Healthy Women, Healthy Pregnancies, Healthy Futures: Action Plan to Improve Maternal Health in America. Available at <u>https://aspe.hhs.gov/sites/default/files/private/aspe-files/264076/healthy-women-healthy-pregnancies-healthy-future-action-plan\_0.pdf</u>. Accessed 6-15-2021.

<sup>162</sup> HHS Office of the Surgeon General. "Facing Addiction in America: The Surgeon General's Spotlight on Opioids." September 2018. Available at

https://addiction.surgeongeneral.gov/sites/default/files/OC SpotlightOnOpioids.pdf. Accessed 6-15-2021.

<sup>163</sup> Miller CM, Ramachandran B, Akbar K, *et al.* "The impact of postpartum hemoglobin levels on maternal quality of life after delivery: a prospective exploratory study." *Ann Hematol.* 2016. 95:2049–2055. Available at <a href="https://pubmed.ncbi.nlm.nih.gov/27623626/">https://pubmed.ncbi.nlm.nih.gov/27623626/</a>. Accessed 11-10-2019.

<sup>164</sup> Institute for Healthcare Improvement. "Evidence-based Care Bundles." Available at <u>http://www.ihi.org/Topics/Bundles/Pages/default.aspx</u>. Accessed 5-28-2021.

<sup>165</sup> Ibid.

