

Equitable Approaches to Addressing Maternal Opioid Use and Infant Care


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The Problem

- Substance abuse is a public health epidemic nationwide and abuse occurs across all cultural, ethnic, religious, and socioeconomic groups
- Prescriptions grew 4-fold over the last decade
- More deaths due to opioids than car accidents
 - 91 people die each day from opioids
- In 2012, enough opioids were prescribed to give every adult in the US one prescription
 - 2018 in Nebraska, providers wrote 50.6 opioid prescriptions for every 100 persons compared to average US rate of 51.4 prescriptions



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Patrick, et al. Journal of Perinatology. 2015; 35:650-655

CURRENT

- There are no standardized drug testing requirements that mandate hospitals to test pregnant women or their newborns.
- Because of the lack of data- exact number of babies exposed is unknown
 - National Institute on Drug Abuse and CDC state that approximately 32,000 babies were born with NAS in 2014- 400% increase from 2004
 - This estimates that a baby is diagnosed with NAS every 15 minutes in the US

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WHY Screen

- Perinatal Alcohol and drug use is an issue critical to the health of mothers and newborns.
 - Screening for use early in pregnancy allows for timely referrals to treatment when needed.
 - Research shows that integrating treatment into prenatal care reduces prenatal exposure, improves pregnancy outcomes, and decreases the cost of care for both mother and newborn
- Substance abuse is associated with adverse pregnancy outcomes
 - Preterm birth
 - Placental abruption
 - Intrauterine death
 - Low birth weight
 - Neonatal withdrawal
- Exposure to alcohol and drugs is a leading preventable cause of birth defects and developmental disabilities in the US.
- Women are more likely to participate in health care while pregnant

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(Goler et al. 2012)

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WHO and WHEN

- Who should be screened?
 - Both ACOG and American Society for Addiction Medicine (ASAM) recommend universal verbal screening of pregnant women for drug and alcohol use.
 - American Academy of Family Physicians recommends periodic screening for all adolescent and adult patients.
- When should screening occur?
 - The earlier screening and referral to treatment occurs, the greater the opportunity to reduce harm to both mother and fetus
 - Screen at first prenatal visit (ACOG and ASAM)
 - Repeat in mid-second trimester (24-28wks) (Chasnoff, 4 PsPlus)

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HOW

- How to screen?
 - Universal verbal screening
 - Completed in private setting
 - Interview based or self-administered questionnaire
 - 4Ps Plus, CRAFFT, CAGE-AID, TACE, and TWEAK

Validation of the 4P's PlusSM screen for substance use in pregnancy validation of the 4P's Plus

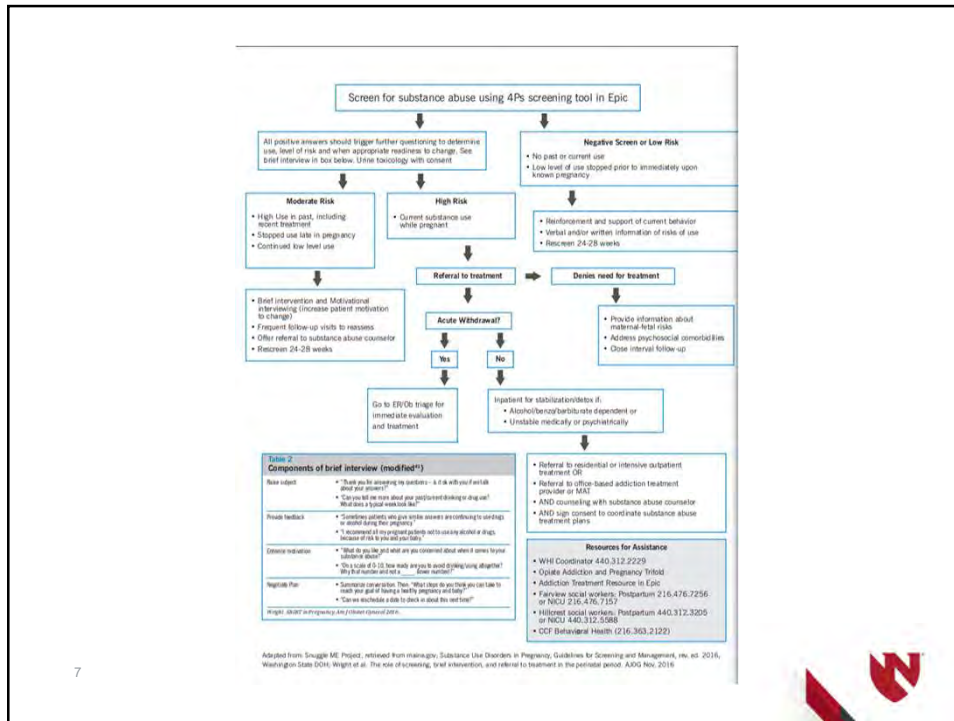
[I.J. Chasnoff](#) , [A.M. Wells](#), [R.F. McGourty](#) & [L.K. Bailey](#)

[Journal of Perinatology](#) 27, 744–748 (2007) | [Cite this article](#)

3220 Accesses | 71 Citations | [Metrics](#)

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The US Child Abuse and Prevention Act (CAPTA) requires that all states have policies to identify newborns exposed to substances.

- The American College of Obstetricians and Gynecologists opposes criminalization of substance use during pregnancy and the use of biologic testing of newborns as a proxy for child abuse or neglect.
- AAP recommends hospitals develop screening policies to detect maternal substance abuse
 - Per AAP, If presence of at least 1 risk factor is a potential indication for newborn drug testing
- Neither organization currently endorses universal testing of biological samples

8 Hudak,ML, Tan RC; Committee on Drugs Committee on Fetus and Newborn American Academy of Pediatrics. Neonatal Drug Withdrawal.

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Purpose of Policy

- To provide consistent, non-discriminatory guidelines for drug testing and reporting
 - Unbiased guidelines

Caring for Infants and Families Affected by Neonatal Abstinence Syndrome (NAS)

Facts	Best practices	3 takeaways
<ul style="list-style-type: none"> NAS incidence has quadrupled within the last decade. Clinical NAS most commonly results from in utero opioid exposure. Signs primarily occur in neurologic, respiratory, and GI systems. 	<p>Mothers</p> <ul style="list-style-type: none"> Screen for substance use disorder. Provide unbiased care and reduce barriers to care. <p>Infants</p> <ul style="list-style-type: none"> Assess with Finnegan NAS scoring system. Use Eat, Sleep, Console tool. <p>See article for more and to obtain continuing nursing education credit. (The American Nurses Association is accredited as a provider of nursing continuing educational development by the American Nurses Credentialing Center's Commission on Accreditation.)</p>	<ul style="list-style-type: none"> Foster maternal-infant bonding. Encourage breastfeeding. Know that medication-assisted treatment is the standard of care for pregnant women/mothers with substance use disorder.

Learn more at <https://www.nurses.com/2023/09/28/caring-for-infants-and-families-affected-by-neonatal-abstinence-syndrome-nas/>

NURSE

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Universal vs Risk-based Testing

Universal

- Avoids systematic bias
- Generate more positive results
 - This then requires more follow-up by labs and patient care teams
 - May increase referrals to social services
 - Increased burden on governmental agencies for relatively low risk mothers

Risk-based

- Utilizes hospital-based criteria
 - ie) maternal history, signs of drug use, social risk factors, limited or absent prenatal care, and symptoms of withdrawal
 - Has been perceived as unfairly profiling mothers
 - May miss infants exposed to drugs if policies do not adequately identify and test for probable exposure

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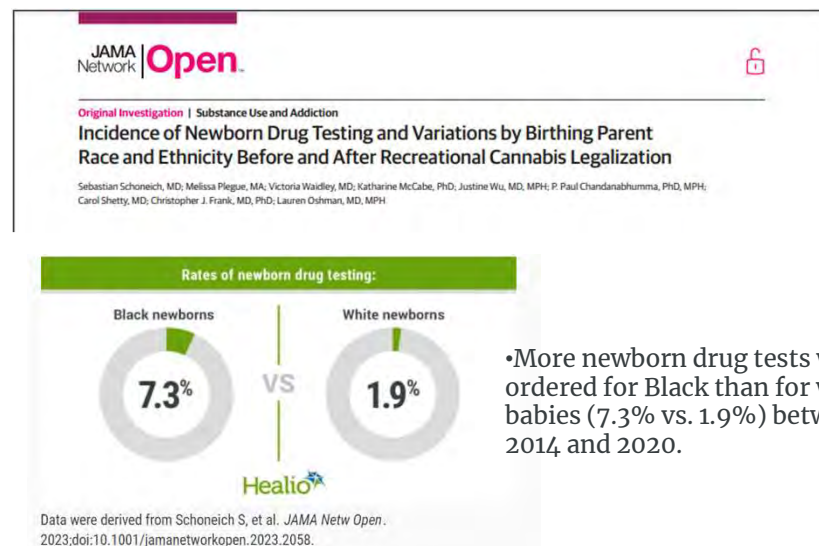
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- Two women filed complaints with the New Jersey Division on Civil Rights (DCR) for violations of their civil rights after they were drug tested without their knowledge or informed consent and in the absence of medical necessity upon arriving at the hospital to give birth.
- Both women's tests returned positive for opiates based on their consumption of a bagel with poppy seeds the morning they went to the hospital.
- Based on these tests, the hospitals called the New Jersey Department of Child Protection and Permanency (DCPP) to report both women for possible abuse or neglect before they even had the chance to parent their newborn children.
- This led to an invasive, traumatic investigation of each woman's family that interfered with their first months with their newborns, shattered their trust in medical personnel, and caused fear of further unnecessary scrutiny from the state.

"I'm terrified of ever going to a hospital again; I'm always going to worry that our family could be torn apart," says client Kate L.

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•More newborn drug tests were ordered for Black than for white babies (7.3% vs. 1.9%) between 2014 and 2020.

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RESEARCH ARTICLES | AUGUST 01 2019

Risk-Based Newborn Drug Testing in a Setting With a Low Prevalence of Maternal Drug Use **FREE**


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POTENTIAL CONFLICT OF INTEREST: The authors have indicated they have no potential conflicts of interest to disclose.

FINANCIAL DISCLOSURE: Dr Wood has a financial relationship with McGraw-Hill professionals and receives royalties for a pediatric board review textbook she coedited, but the work presented was not influenced by that relationship; Drs Krasowski and McMillin have indicated they have no financial relationships relevant to this article to disclose.

Hosp Pediatr (2019) 9 (8): 593-600.
<https://doi.org/10.1542/hpeds.2018-0256>



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- Objective: determine the predictive value of an institutional risk-based newborn drug-testing tool for detecting maternal drug use during pregnancy
- 5.5 months umbilical cords were collected; universal testing performed on all infants
 - Infants categorized as “no identified risk” and “at risk” based on institutional risk assessment tool
 - “no risk” cords were deidentified after determined there were no risk factors per the tool and screening performed
- Hypothesis was the prevalence of all drug use, including illegal drugs, would be lower in the group not identified for testing compared with the group with an identified risk factor

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TABLE 1 Risk Factors Included in the Institutional Tool for Newborn Drug Testing

Maternal risk factors during pregnancy
Mother tested for drug use during pregnancy
Mother declined drug testing during pregnancy
Unexplained positive drug screen result for mother during pregnancy
Current or previous drug use, including maternal self-report
Altered mental status suggestive of influence and/or withdrawal from drug(s)
Physical signs suggestive of drug use
Previous infant exposure to prenatal drug use
Active alcohol use during current pregnancy
Active tobacco use during current pregnancy
Infection with hepatitis B and/or C, syphilis, or HIV
No, late, and/or poor prenatal care
Placental abruption
Social risk factors
History of domestic violence by current partner
History of child abuse, neglect, and/or previous child protective services involvement
Current incarceration
Neonate risk factors
Signs or symptoms consistent with neonatal withdrawal

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Results

- 857 Newborns had umbilical cord drug testing performed
 - 257 “at risk” cohort/600 “no risk identified” cohort
 - 22.6% “at risk” cohort tested positive for 1 or more drugs compared to 8.7% of “no identified risk” cohort
 - The results of our study show that the newborns with no risk factors from the risk-based tool present at our institution comprise a group with consistently lower drug rates in umbilical cord tissue than the cohort with an identified risk factor

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> Am J Obstet Gynecol MFM. 2022 Aug 26;4(6):100733. doi: 10.1016/j.ajogmf.2022.100733.
Online ahead of print.

Urine drug screening on labor and delivery

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Miki Kiyokawa ², Kameko Karasaki ², Pamela Estrada ², Reema Ghatnekar ², Men-Jean Lee ²,
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Free article

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Abstract

Background: Substance use including opioids, methamphetamines, benzodiazepines, and barbiturates during pregnancy is harmful for the pregnant person and the fetus. Routine screening using validated questionnaires is recommended, but often biologic sampling is done instead. There is often bias in urine drug screening on labor and delivery units.

Objective: This study aimed to compare characteristics of people who did and did not receive urine drug screening during labor and delivery and to examine the relationship of maternal results to neonatal results.


Study design: This was a retrospective chart review examining all people in 2017 who delivered in the labor and delivery unit at our institution. We collected urine drug screening result information, maternal demographic data, follow-up after positive maternal tests, and neonatal test results. Individual characteristics and obstetrical outcomes were analyzed.

Results: Of 6265 deliveries, 297 urine drug screening tests were ordered. People who were tested identified most commonly as Native Hawaiian or Pacific Islander ($P < .0001$). The most common indications for ordering tests were a history of substance use and insufficient prenatal care ($P < .0001$). People who tested positive were more likely to self-identify as White ($P = .03$) and have history of substance use ($P < .0001$). Among the positive test results, 24 (24%) were caused by a provider-ordered medication. Self-identification as Native Hawaiian or Pacific Islander was not predictive of a positive result. Of the tested people, 36% (108/297) had a positive result on preliminary testing, and 33% (98/295) on confirmatory testing.

Conclusion: Native Hawaiians and Pacific Islanders were more likely to undergo testing, whereas White people were more likely to have a positive result. Maternal results were not reliable for predicting neonatal drug test results and vice versa. With rising rates of substance use disorders in the pregnant and reproductive-age population, standardized unbiased race-neutral guidelines for urine drug screening should be implemented using laboratory test results that include preliminary and reflex confirmatory results.


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Research


Drug Testing Practices and Policies of Labor and Delivery Units Across the Southeastern United States

[Dolly Pressley Byrd](#)  , [T. Robin Bartlett](#)


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<https://doi.org/10.1016/j.jogn.2022.10.002> 

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- This study investigated the different drug screening practices implemented in labor and delivery units across hospitals in the southeastern U.S. In the study, about 80 percent of hospitals that responded said they have a formalized drug testing process.
 - But, that means 20% do not
- In the survey, about 18 percent of the hospitals reported that they tested all pregnant patients for drugs, while about 14 percent said testing only happened if a clinician was suspicious that a patient might be using drugs.
- Vast majority — about 61 percent — tested patients based on certain criteria, such as not receiving any prenatal care or having a history of substance use.

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Steps to Unbiased Screening

1. Create an institutional procedure on pre-natal, universal verbal drug screening.
 1. Choose a validated screening tool
 2. Train staff and integrate tools into EMR
 3. Positive Screen
2. Create an institutional Policy for both mothers and infants on drug testing guidelines.
3. Consider create an institutional risk assessment tool for L&D nurses to utilize to guide newborn drug testing.
 1. Important to remember that factors such as late entry to prenatal care or preterm birth, can disproportionately impact Black women
4. Document



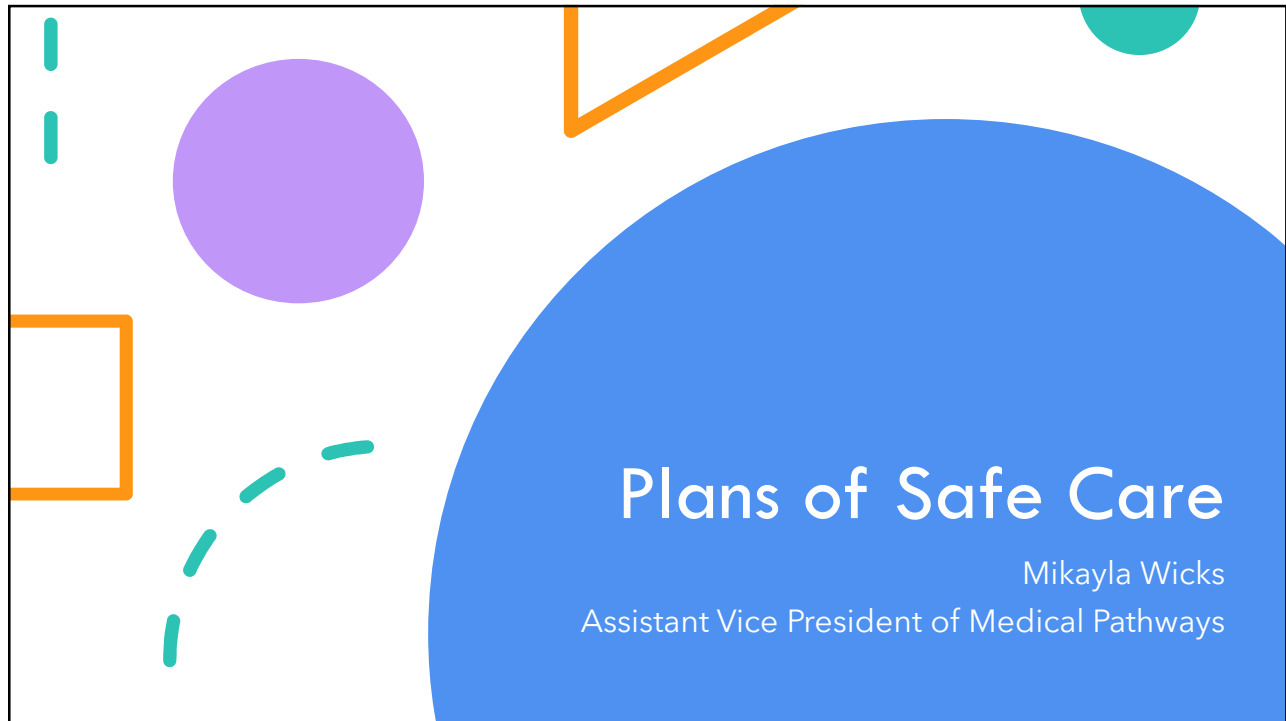
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Plans of Safe Care

Mikayla Wicks
Assistant Vice President of Medical Pathways

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The Comprehensive Addiction and Recovery Act (2016)

- Requires
 - Policies and procedures to address the needs of infants born and identified as being:
 - Affected by **illegal** substance abuse; or
 - Withdrawal symptoms resulting from prenatal drug exposure; or
 - A Fetal Alcohol Spectrum Disorder.
 - Healthcare providers involved in the delivery or care of infants **notify the child protective services system** of the occurrence of the condition of such infants.



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The Comprehensive Addiction and Recovery Act (2016)

- Requires
 - The **development of a plan of safe care** for the infant born and identified as being affected by **illegal** substance abuse or withdrawal symptoms or FASD to address **"the health and substance use disorder treatment needs of the infant and affected family or caregiver"**.
 - The development and implementation by the State of **monitoring systems** regarding the implementation of such plans to determine whether and in what manner local entities are providing, in accordance with State requirements, **referrals to and delivery of appropriate services** for the infant and affected family or caregiver.



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Monitoring System



Child Abuse
Neglect Hotline



Notification

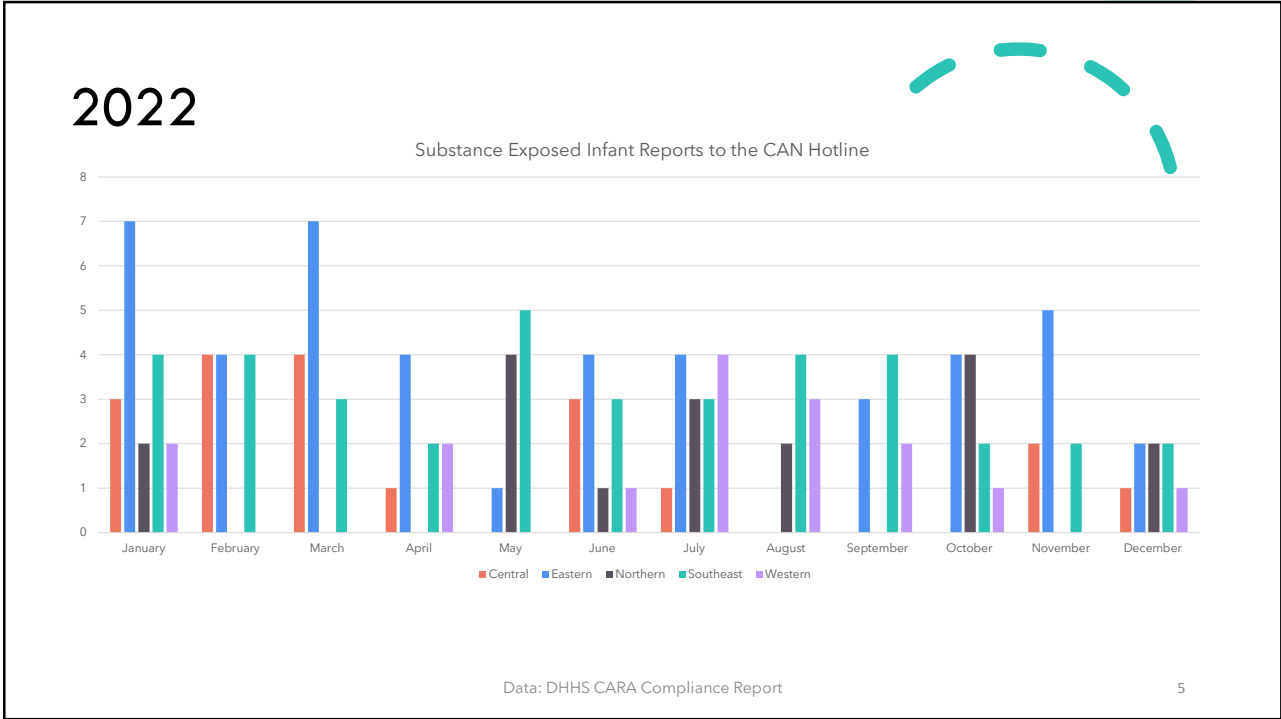


Plan of Safe
Care

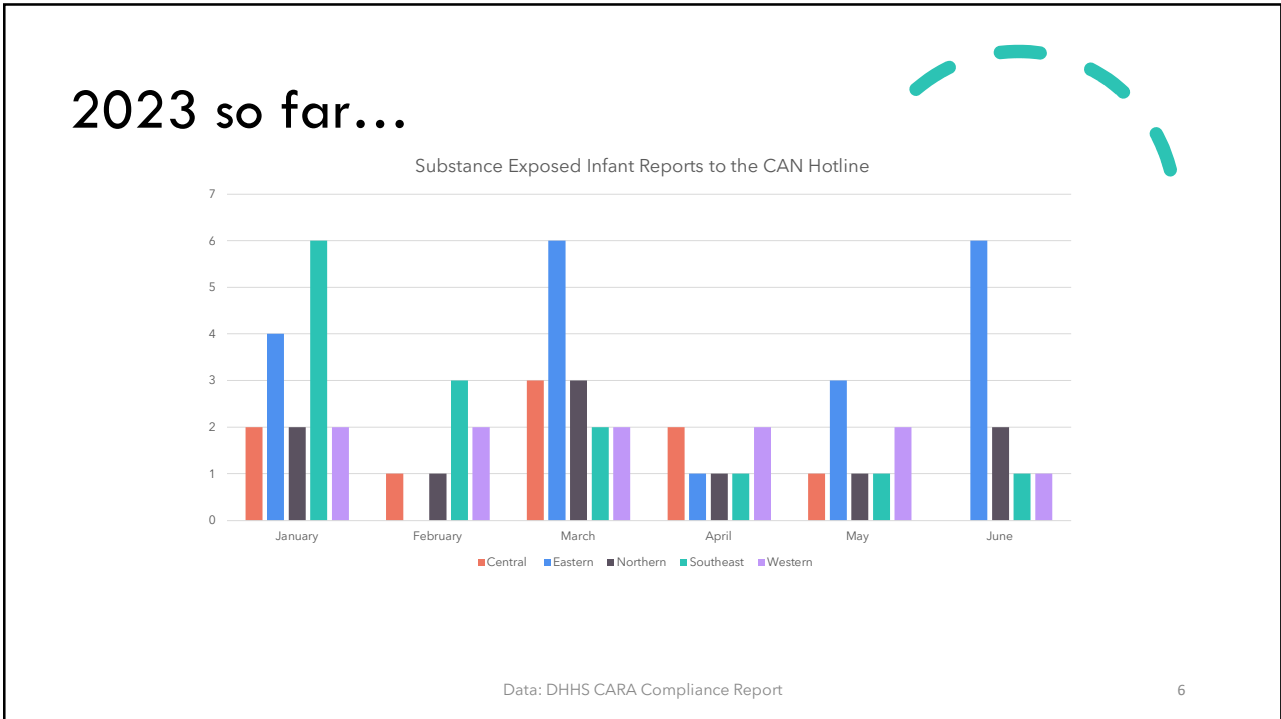
<https://dhhs.ne.gov/Pages/Comprehensive-Addiction-and-Recovery-Act.aspx>

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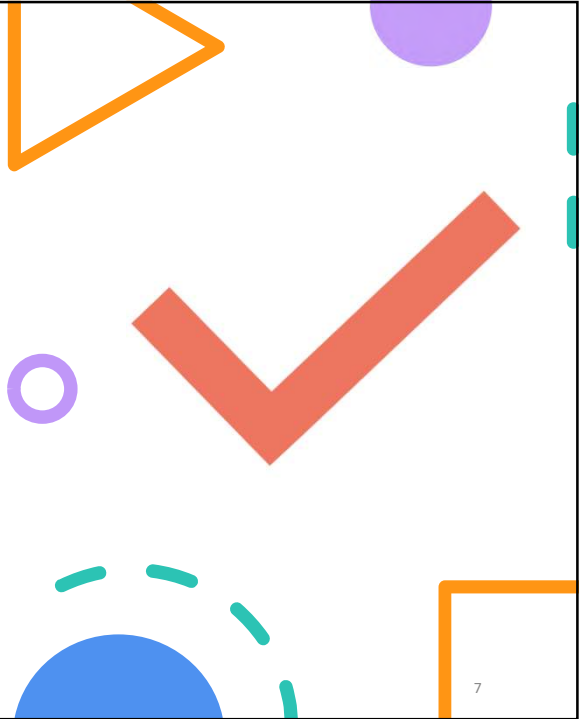
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Notifications

- 2022
 - 134 Notifications
 - 100 **were** reported to CPS
 - 32 were **not** reported to CPS
 - 2 did not answer
- 2023
 - 60 Notifications
 - 43 **were** reported to CPS
 - 17 were **not** reported to CPS



Prenatal Exposure To:

- 2022
 - Marijuana
 - Nicotine/Tobacco
- 2023
 - Marijuana
 - Nicotine/Tobacco
 - Methadone (MAT)



Prenatal Plans of Safe Care

- Can mitigate impact of exposure & minimize a crisis at the birth event.
- Supports stronger partnerships across providers through Care Coordination.
- Not required by federal CAPTA changes, but a supportive, preventative practice.
- Increases Empowerment!



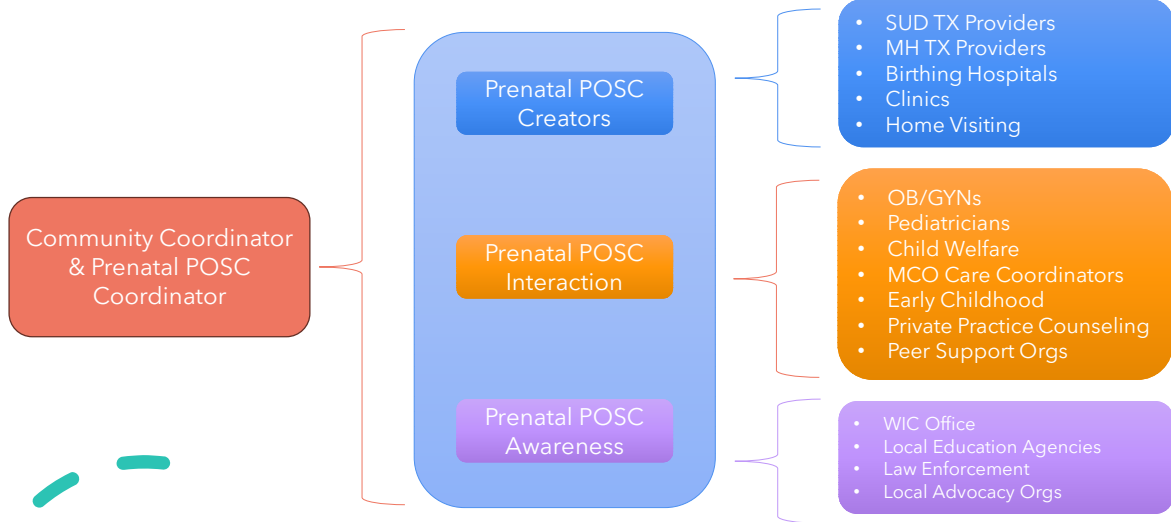
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Plan of Safe Care Binder Tabs

1. Plan of Safe Care
2. Contact Information
3. Consent & Release of Information Forms
4. Child Resources
5. Appointments & After Visit Summaries
6. Certificates & Accomplishments
7. Notes & Additional Information

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NE Prenatal POSC Structure: Local-Level



Thank you

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