Testing, Testing: Drug Testing in the Child Welfare Setting

SPRING 2026

MOLLIE NISEN, MD, FASAM

Introduction and Disclosures

- **Consultant**, Zero to Three, ITCP and Safe Babies Programs
- **Principal Investigator**, NJ DMHAS MWRAP and IOTSEI Grant
- **Attending Physician,** Cooper University Center for Healing
- **Assistant Professor,** Cooper Medical School of Rowan University

Learning Objectives

ARTICULATE WHAT INFORMATION TOXICOLOGICAL TESTING *DOES AND DOES NOT PROVIDE*.

DISCUSS COMMON MIS-INTERPRETATIONS OF TOXICOLOGICAL TESTING IN THE PERINATAL SETTING.

IMPLEMENT BEST PRACTICES FOR SUD AND DRUG SCREENING IN THE CHILD WELFARE SPHERE

SETTING THE STAGE

MEDICAL, LEGAL AND IDEOLOGICAL BACKGROUND

Grounding Understandings

1

Substance use disorders are **chronic illnesses that people do not choose to have**. Treatment works and recovery happens all the time.

2

Child abuse and neglect are real, rare, and **within our skill and responsibility to assess and respond.**

3

Substance exposure or parental substance use are **not in and of themselves child abuse federally (**state law varies), but can be risk factors.

4

We all have the **common goal of supporting a happy and healthy parent and baby.**

Talking Points to Use When Discussing the Legal Implications of Substance Use During Pregnancy

The following talking points have been drawn from a resource prepared by the American College of Obstetricians and Gynecologists (ACOG). Review, customize, and practice them for when you need to clearly and briefly explain the impacts of policies that penalize pregnant women for substance use. See the ACOG toolkit on *Pregnant women and prescription drug abuse, dependence and addiction* for additional points and research that you can use to convey policy impacts.

- **Healthy mothers and babies are our common goal.** Drug and alcohol use is a health issue that deserves more attention. For pregnant women who misuse drugs and alcohol, including opiate painkillers, our shared goal must be a healthy outcome for both mother and baby.

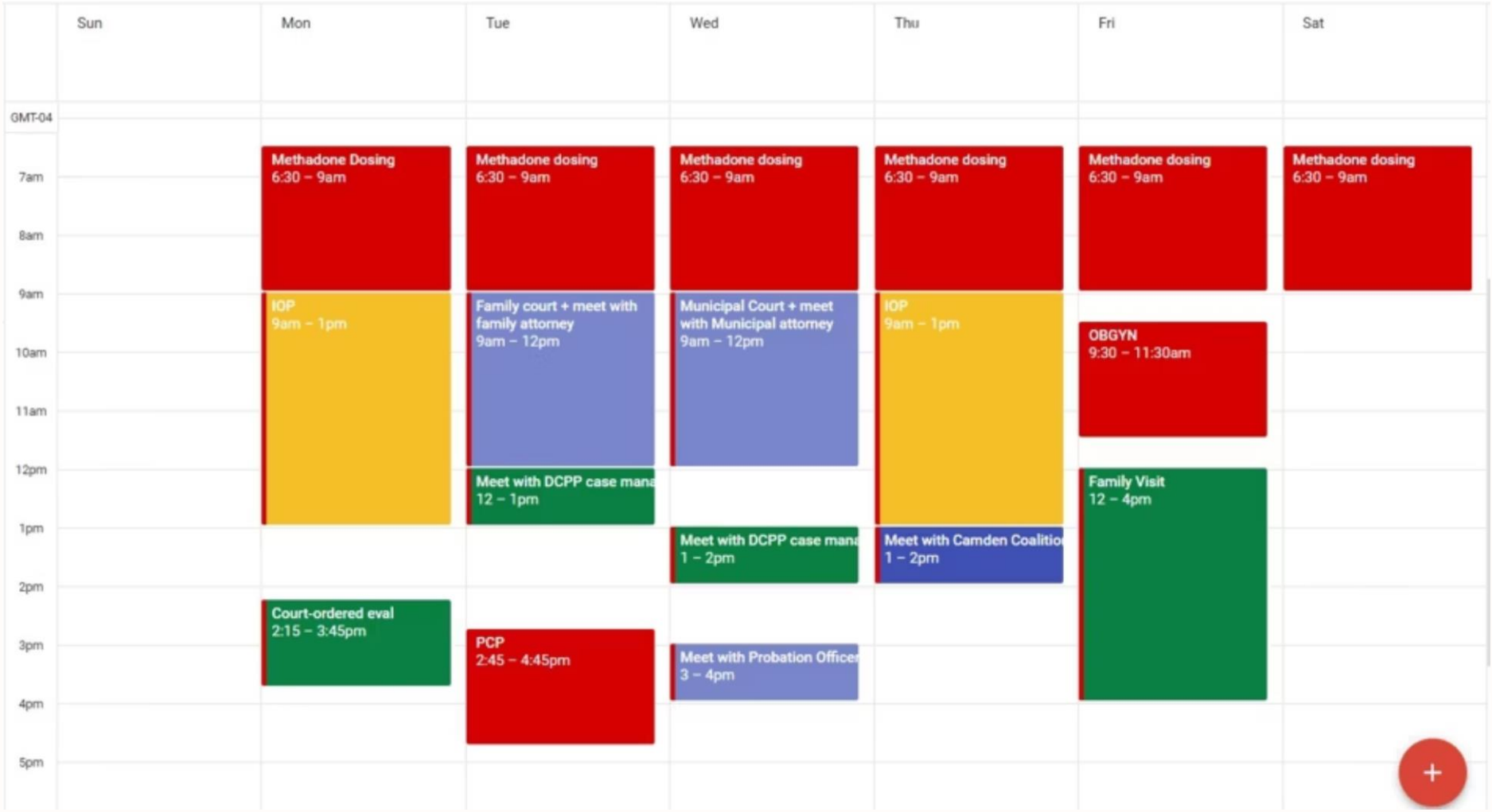
- **Health experts agree that substance use during pregnancy is best addressed through harm reduction and treatment.** Every leading medical and public health organization that has addressed this issue has concluded that education, prevention, and community-based treatment are the best methods for reducing substance use during pregnancy.†

- **Staying connected to the healthcare system is key to improving birth outcomes.** The evidence shows that getting prenatal care, staying connected to the healthcare system, and maintaining open communication channels with physicians and healthcare providers about substance use helps improve birth outcomes, regardless of whether a woman can successfully stop using substances.

- **Policies that penalize pregnant or parenting women for substance use leads to adverse consequences for both mother and baby.** Research shows that state laws and policies that penalize women for substance use during pregnancy lead to a host of negative consequences including:
  - Deterring women from seeking the care they need to reduce their substance use.
  - Discouraging women from disclosing substance use to healthcare providers who could help them access treatment and care.
  - Pressuring women to end their pregnancies in order to avoid arrest if they do not feel they can successfully stop using substances.
  - Limiting health care providers' ability to provide the best possible care to women, including providing appropriate treatment for pain or substance use disorders.

https://healthystart-tasc.org/wp-content/uploads/2024/04/State-Legislation-Substance-Use-During-Pregnancy.pdf

Example schedule for someone in treatment + child welfare involvement



STIGMA AND CRIMINALIZATION IN PERINATAL SUD

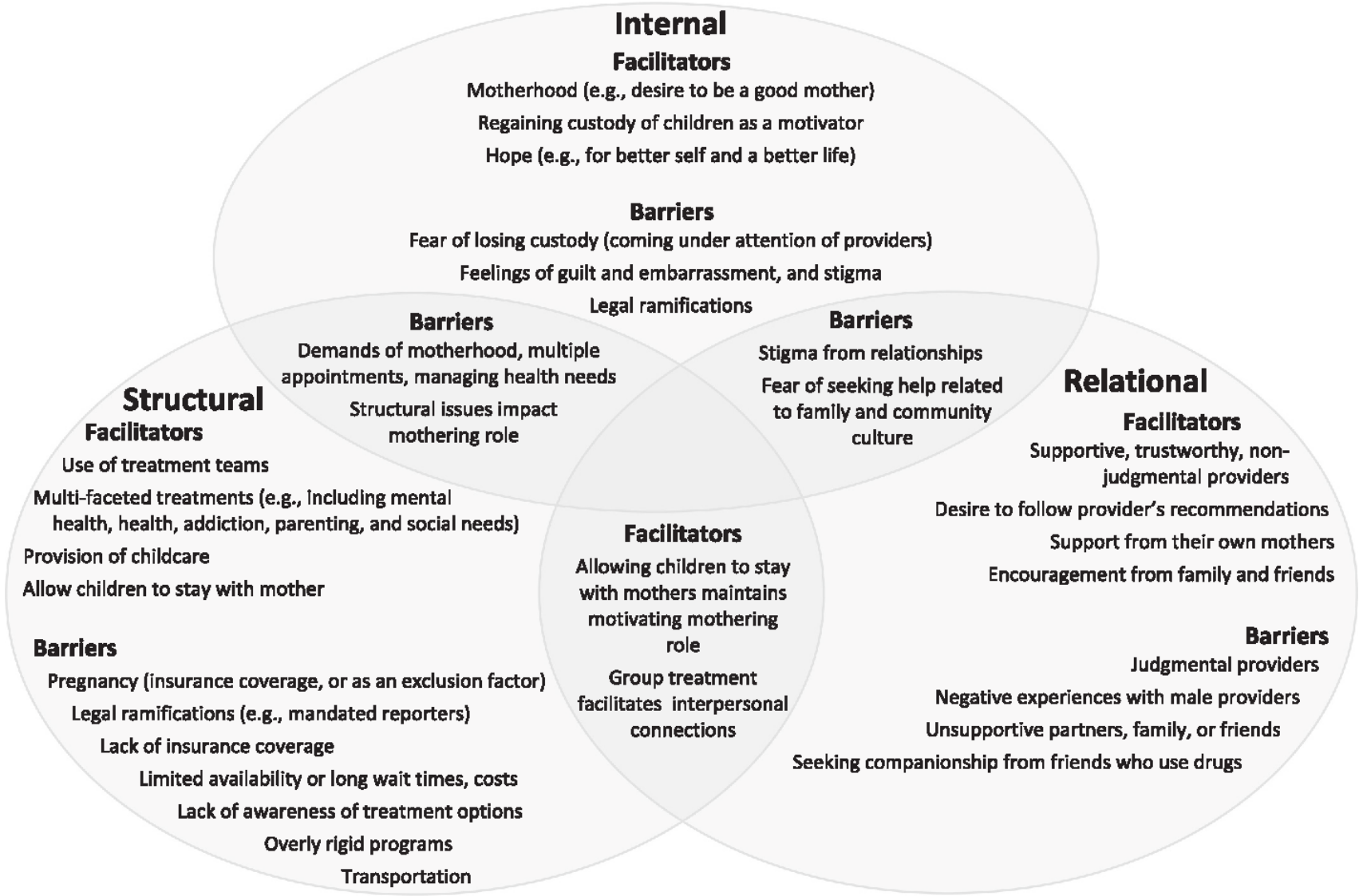
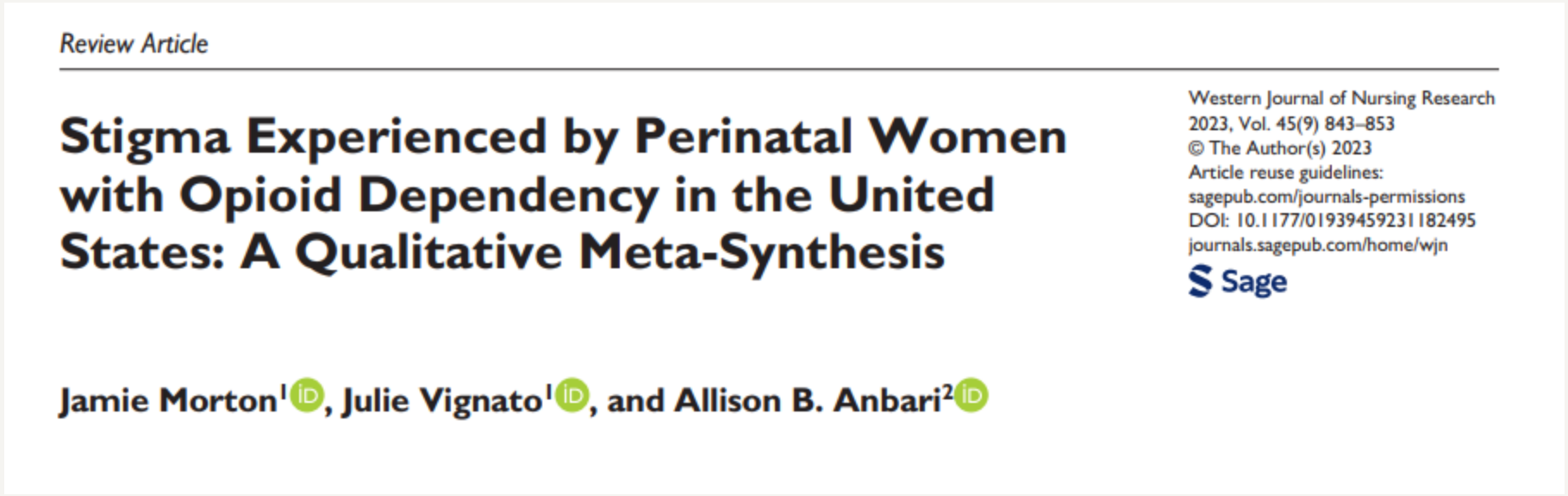


Fig. 2. Facilitators and barriers to treatment by the three emerging categories in order of frequency within each domain and highlighting areas of overlap.

Barnett, E. R., Knight, E., Herman, R. J., Amarakaran, K., & Jankowski, M. K. (2021). Difficult binds: A systematic review offacilitators and barriers to treatment among mothers with substance use disorders. *Journal of Substance Abuse Treatment*, *126*, 108341.



Review Article

Stigma Experienced by Perinatal Women with Opioid Dependency in the United States: A Qualitative Meta-Synthesis

Western Journal of Nursing Research
2023, Vol. 45(9) 843–853

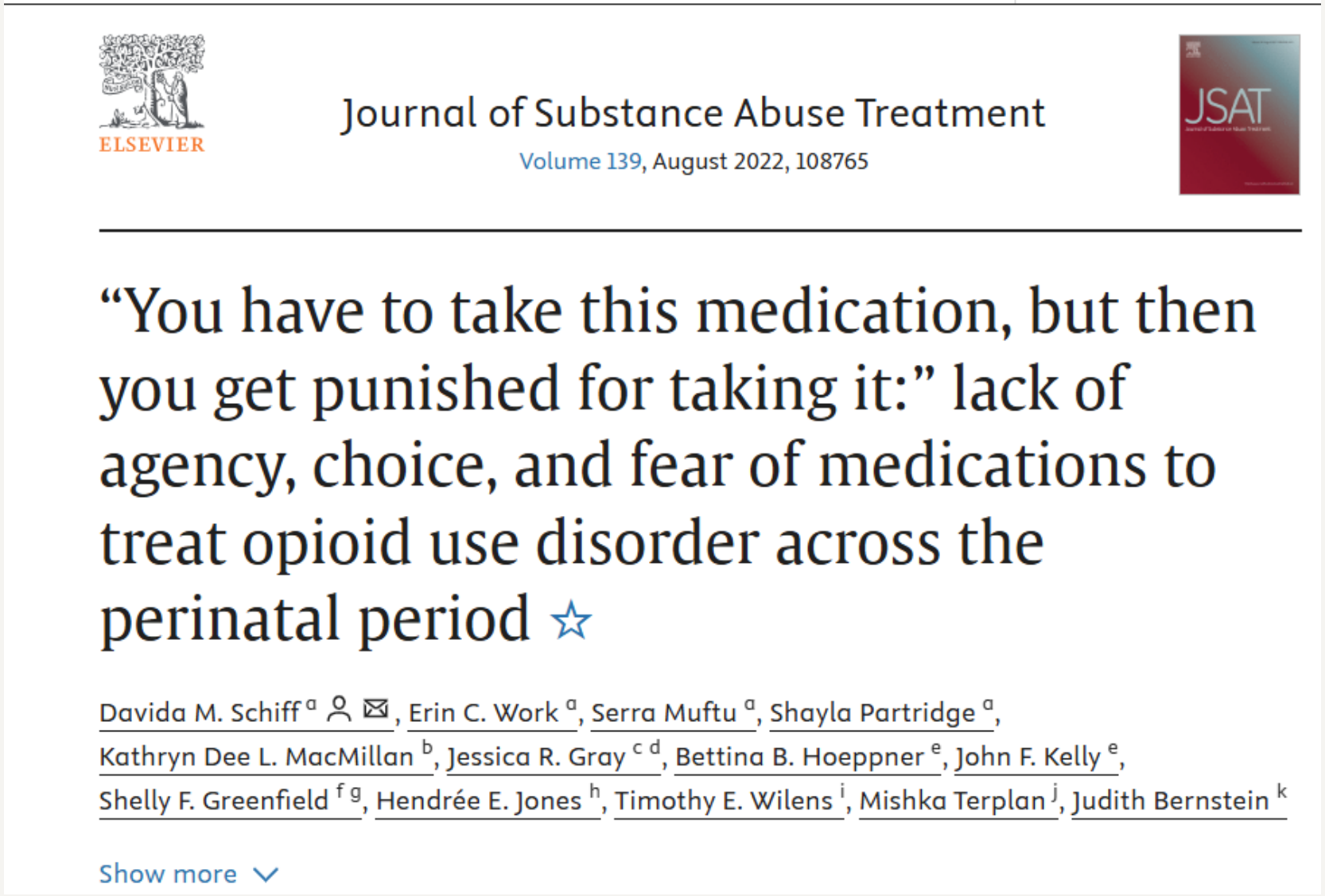
DOI: 10.1177/01939459231182495
journals.sagepub.com/home/wjn
Sage

Jamie Morton[1], Julie Vignato[1], and Allison B. Anbari[2]

- (a) Perinatal stigma experiences may **prevent women from accessing care**;
- (b) Infant-associative stigma may influence the woman to **deflect stigma from her infant onto herself**; and
- (c) There is the **risk of mothers withdrawing their infants from healthcare** to protect from future anticipated stigma.

Morton, J., Vignato, J., & Anbari, A. B. (2023). Stigma experienced by perinatal women with opioid dependency in the United States: A qualitative meta-synthesis. *Western Journal of Nursing Research*, *45*(9), 843-853.

Subjective Experience



ELSEVIER

Journal of Substance Abuse Treatment

Volume 139, August 2022, 108765

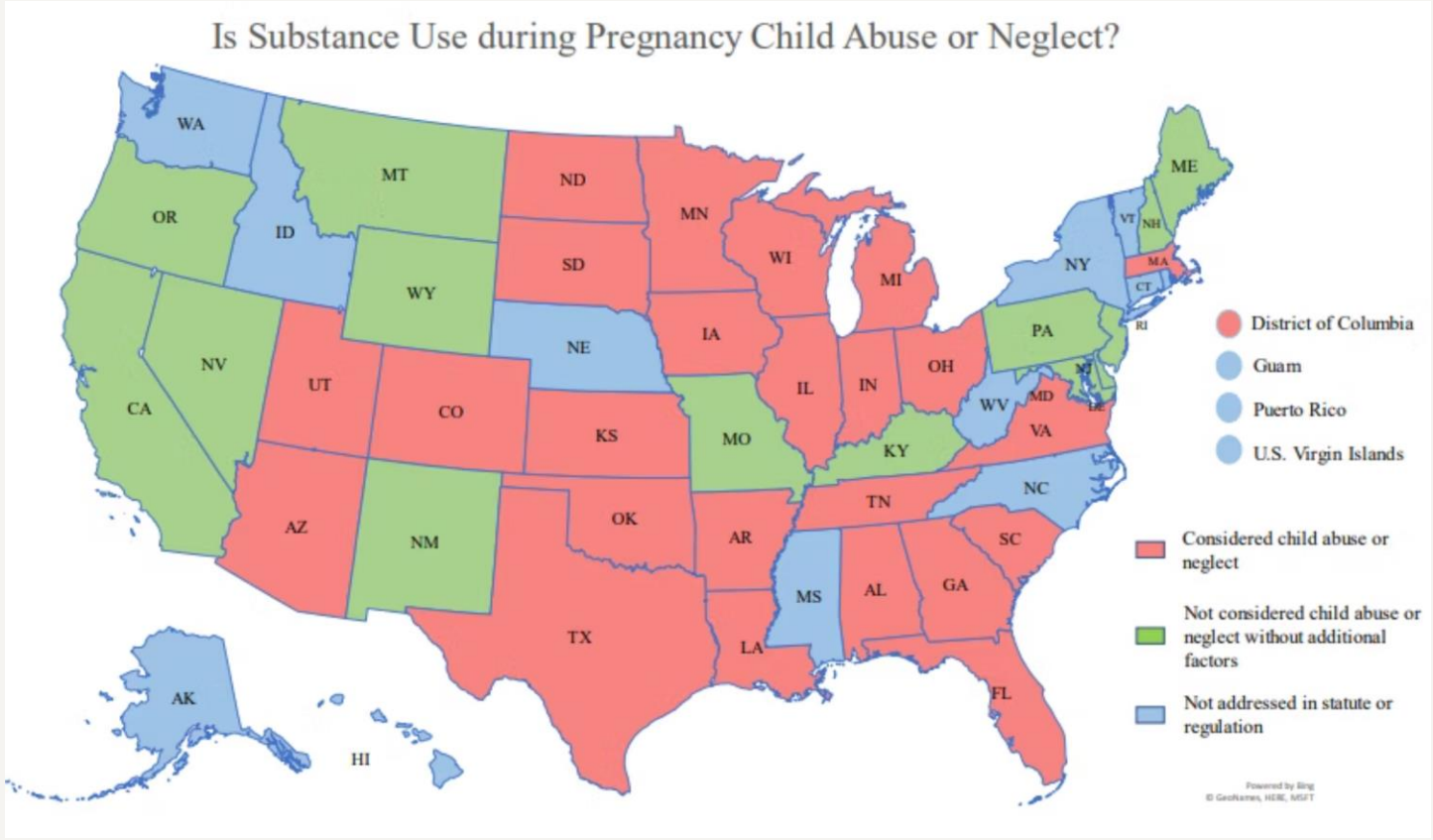
"You have to take this medication, but then you get punished for taking it:" lack of agency, choice, and fear of medications to treat opioid use disorder across the perinatal period ☆

Davida M. Schiff [a], Erin C. Work [a], Serra Muftu [a], Shayla Partridge [a], Kathryn Dee L. MacMillan [b], Jessica R. Gray [c d], Bettina B. Hoeppner [e], John F. Kelly [e], Shelly F. Greenfield [f g], Hendrée E. Jones [h], Timothy E. Wilens [i], Mishka Terplan [j], Judith Bernstein [k]

Show more

Schiff, D. M., Work, E. C., Muftu, S., Partridge, S., MacMillan, K. D. L., Gray, J. R., ... & Bernstein, J. (2022). "You have to take this medication, but then you get punished for taking it:" lack of agency, choice, and fear of medications to treat opioid use disorder across the perinatal period. *Journal of substance abuse treatment*, *139*, 108765.

Criminalization of SUD in Pregnancy

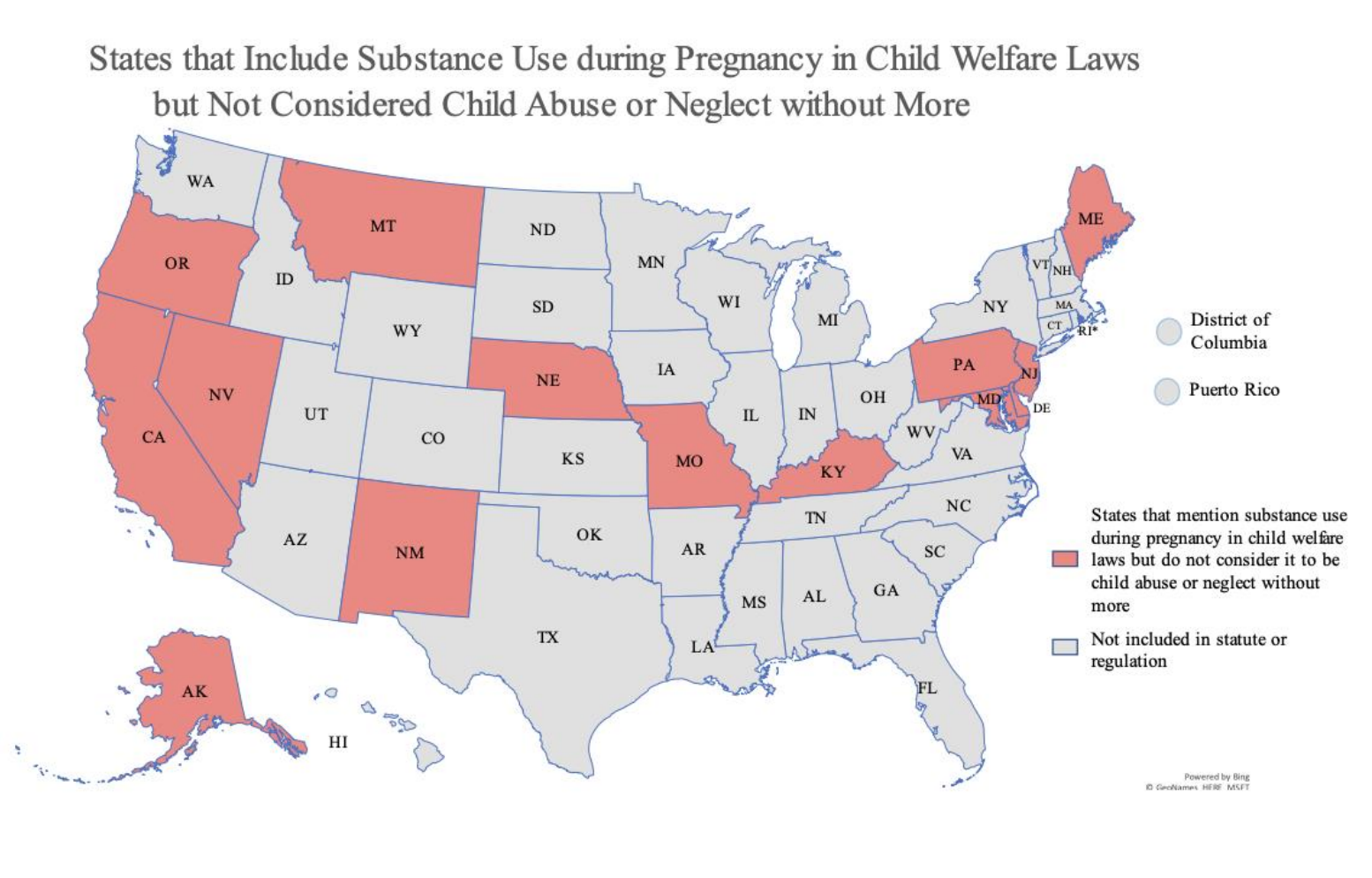


Substance Use During Pregnancy and Child Abuse or Neglect: Summary of State Laws. June 2024. Legislative Analysis and Publica Policy Association.

Outcomes from Criminalization of SUD in Pregnancy:

- Increased NAS rates (Faherty, 2019)
- Reduced admission to SUD treatment among pregnant people (Kozhimannil, 2019; Tabatabaeepour, 2022)
- Later initiation of and less overall prenatal care (Simmons, 2022)
- Decreased mean APGAR, increased stillbirth, increased infant deaths (McMichael, 2021)

There is no reliable data that increased criminalization of SUD in pregnancy *improves* pregnancy or birth outcomes.



https://legislativeanalysis.org/wp-content/uploads/2022/10/Substance-Use-During-Pregnancy-And-Child-Abuse-Or-Neglect-Summary-of-State-Laws.pdf

WHY DO WE PERFORM TOXICOLOGIC TESTING?

Drug Testing and Perinatal Care

Clinical Role of Toxicological Testing

- Will it change our management?
- Obtundation (/mental status changes) of unclear cause
- Withdrawal or other severe clinical presentation of unclear cause infant or parent.
- Identification of adulterants in supply
- Measure of treatment adherence

Can a single drug test determine....?

YES

- Presence of a substance in the body within a particular window of time
- Presence or absence of adulterants
- Binary information about adherence to treatment plan

NO

- Acute intoxication
- Timing, route or quantity of use
- Presence or absence of a substance use disorder or “addiction”
- Identify *any* possible substance present
- Whether someone is a 'safe parent'

Explaining why we test (in the SUD treatment setting):

Why do we do drug testing?

- Unexplained urgent clinical presentation
- One piece of information about how medication is working
- Notify people about substance adulteration/contamination
- Insurance/regulatory auditing purposes
- In some states: legal requirement

We DO NOT do drug testing:

- Without your consent
- To kick you out of your program
- Because we do not trust you
- Because we want to 'bust' or 'catch' you
- Because we want to get you in trouble

Slide adapted from Camden Coalition (Laura Sorenson/Michelle Adyniec)

TOXICOLOGIC TESTING 101/201

TYPES OF TESTING, SENSITIVITY, SPECIFICITY

Presumptive and Definitive Tests

Technology

- Immunoassay
- Various chromatography and mass spectrometry techniques

Capability

- Sensitivity
- Specificity

Common model

- Screen with immunoassays
- Confirm with a more specific test to rule out false-positives

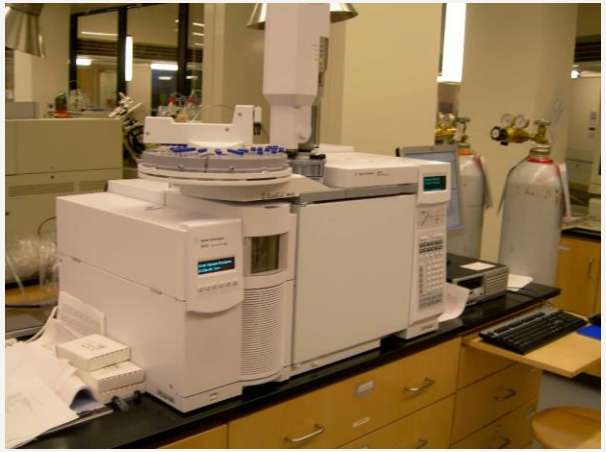
Other principles of drug testing:

- Combined with a patient's **self-report**
- Used as a **therapeutic tool**
- **Performed at intake** to assist in a patient's initial assessment and treatment planning
- **Used to monitor** recent substance use in all addiction treatment settings
- Used to monitor the effectiveness of a patient's **treatment plan**

Types of Toxicologic Testing

PRELIMINARY Testing

- Point of care or rapid testing
- High 'sensitivity', low 'specificity'
- Qualitative
- Risk for inter-reader variability ("do you see that line?")
- Different substances with different rates of false positives/negatives
- Positives/unexpected results should be sent for confirmation



CONFIRMATORY Testing

- "Send out"
- High sensitivity and specificity
- Quantitative
- Costly
- Slow return time (3-7 days)
- Able to detect wider variety of substances

Common Cross Reactants

- **Amphetamine immunoassays**: amantadine, **bupropion**, ephedrine, **labetalol**, phentermine, pseudoephedrine, ranitidine, selegiline, and **trazodone** metabolites
- **Benzodiazepine immunoassays**: oxaprozin, sertraline, efavirenz
- **Cannabis immunoassays: ibuprofen**, naproxen, efavirenz, pantoprazole, baby washes
- **Cocaine immunoassays**: few interferences are known, but the medical use of cocaine as a local anesthetic or drinking tea from coca leaves is a possible cause of interference.
- **Opioid immunoassays**: quinolones, verapamil
- **Tricyclic antidepressant immunoassay**s: carbamazepine, cyclobenzaprine, **diphenhydramine**, phenothiazines

What can impact result interpretation?

- Validity testing (control)
- Sample collection technique
- Processing procedures (i.e. 'washing' procedures)
- Chemical modification (hair)
- Chain of custody
- Contamination, Lab Calibration
- “Sample Swapping” or tampering
- Assay cut-offs (minimum calculated/detectable level of substance in a sample)
- Knowledge of patient history, prescribed medication list

Drug testing should be interpreted by a *trained individual in the context of patient history and medication list.*

TABLE 4. Comparing Testing Characteristics Across Matrices

	Blood	Breath	Oral Fluid	Urine	Sweat	Hair
General detection period	<24 hours [2] 1–8 hours [25] 1–48 hours [26]	~1 hr per standard drink	<24 hours [2] 12–24 hours [27] 1–36 hours [28] 5–48 hours [29] 12–48 hours [25]	1.5–4 days [29] 1–3 days [25,26,30]	Continuous, usually 1–4 weeks [2,26]	7–90 days [2] 7–100 days [26]
POCT/On-site immunoassay available	Yes, primarily used for alcohol	For alcohol	Yes	Yes	No	No
Primarily detects	Parent drug compound; blood alcohol concentration	Parent drug compound; blood alcohol concentration	Parent drug compound	Drug metabolite	Parent drug compound	Parent drug compound
Best use in treatment setting	Determination of acute impairment or intoxication for alcohol	Determination of acute impairment or intoxication for alcohol	Short-term detection in ongoing treatment	Intermediate-term detection in ongoing treatment	Medium-term prospective monitoring	Long-term monitoring; 3-month drug use history
Ease of collection	Requires staff trained in phlebotomy	Easily collected	Easily collected	Requires specialized collection facility (restroom)	Easily collected	Easily collected
Intrusiveness of collection	High for intravenous access	Low	Low	High	Low	Low
Resistance to tampering	High	High	High, but some uncertainty	Low	High, but some uncertainty	High when chemically untreated
Retesting same sample	Difficult	Generally not possible	Difficult	Possible	Possible depending on patch used	Easy

Jarvis, M., Williams, J., Hurford, M., Lindsay, D., Lincoln, P., Giles, L., ... & Safarian, T. (2017). Appropriate use of drug testing in clinical addiction medicine. *Journal of addiction medicine*, *11*(3), 163-173.

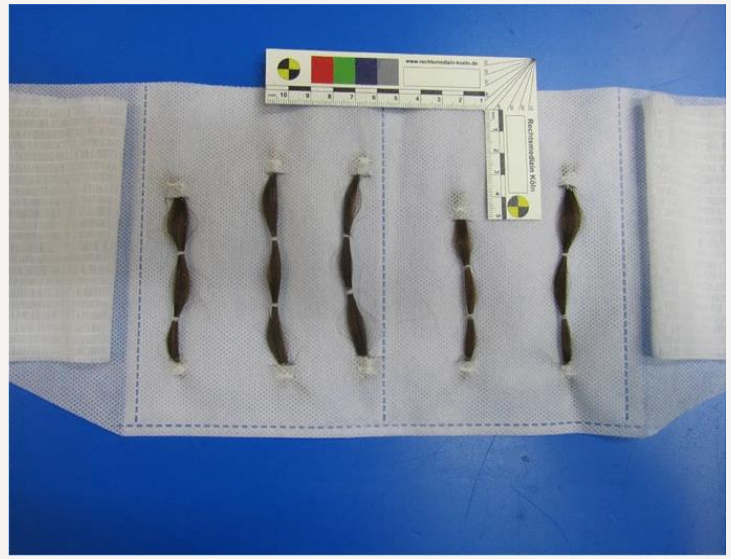
Sweat Patch Testing

- Non invasive
- Tamper resistant (tamper evident design)
- Longer detection period (prospective)
- May not detect all substances (i.e. limited evidence for fentanyl and other assays)
- Synthetic opioids (buprenorphine, methadone, fentanyl) commonly in “expanded panel”; fewer scientific papers showing efficacy for these substances
- “Generally scientifically reliable” ?
- Very low detection cutoffs
- Limited use currently in addiction medicine settings, not supported by ASAM

Hair Segment Testing

- “Non-invasive” ??
- Tampering risk complex – chemical modification of hair can impact detection
- Longer detection period (retrospective)
- Washing/matrix/environmental contamination
  - Methadone/EDDP sweat/hair study
- Hair texture, area of sample, storage can all alter results
- Hair growth patterns + rates vary, ‘segmenting' studies cannot be relied upon to pinpoint *timeline* of last use
- Low frequency use sensitivity limited

"Our study has shown that an external contamination by transfer of methadone and EPPD from sweat into hair matrix is possible, although there was no correlation found between blood concentrations, sweat concentrations and substance concentrations in hair samples"



Feld, K., Dahm, P., Kieliba, T., Klee, A., Rothschild, M. A., Andresen-Streichert, H., & Beike, J. (2021). Evidence for the transfer of methadone and EDDP by sweat to children’s hair. *International journal of legal medicine*, *135*(5), 1799-1811.

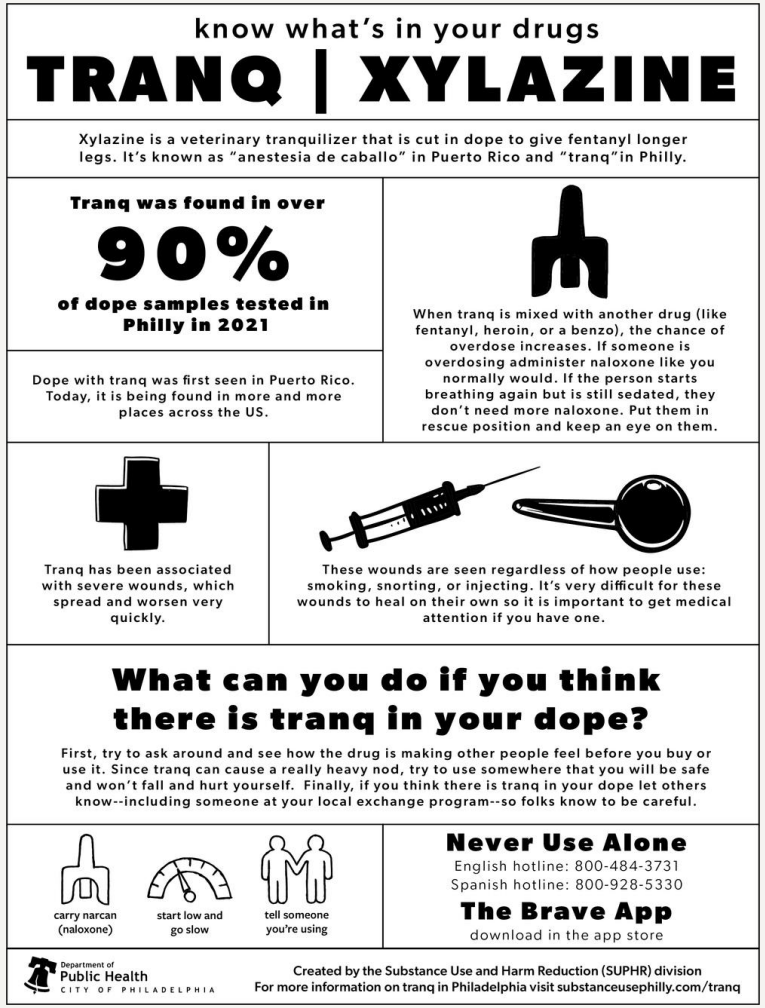
Nail Clipping Testing

- Mechanism of drug integration into nail matrix is not fully understood
- Half lives of substances in this matrix not well understood
- Issues with sufficient sample collection
- Minimally invasive, broad exposure period
- Individual nail growth rates, toenail vs finger nail?
- Lack of universally established cut off values
- Longer window *to* detection
- Limited data re: sensitivity/specificity, especially with low level use
- Limited data re: novel psychoactive substances

Bandoli, G., Anunziata, F., Bogdan, R., Zilverstand, A., Chaiyachati, B. H., Gurka, K. K., ... & Bakhireva, L. N. (2024). Assessment of substance exposures in nail clipping samples: a systematic review. *Drug and alcohol dependence*, *254*, 111038.

Most "opiate" tests detect morphine derivatives only and ***not synthetic opioids like fentanyl****.*

Or MOUD like ***methadone or buprenorphine.***

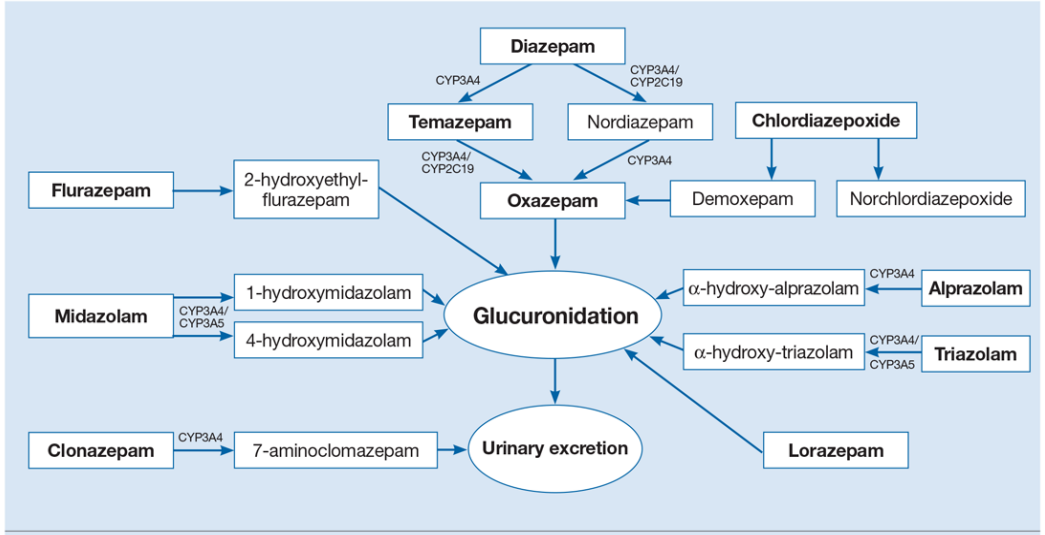


Novel synthetic opioids, benzos and adulterants like xylazine and medetomidine **are not included** in standard drug testing panels.

Typical benzodiazepine tests only detect oxazepam derivatives, **missing common drugs of misuse** alprazolam **(Xanax©) and** clonazepam **(Klonopin©)**

Figure 1

Metabolic pathways of commonly used benzodiazepines[a]



[a]Drugs in bold are commonly used benzodiazepines

CYP: cytochrome P450

Source: Reference 14

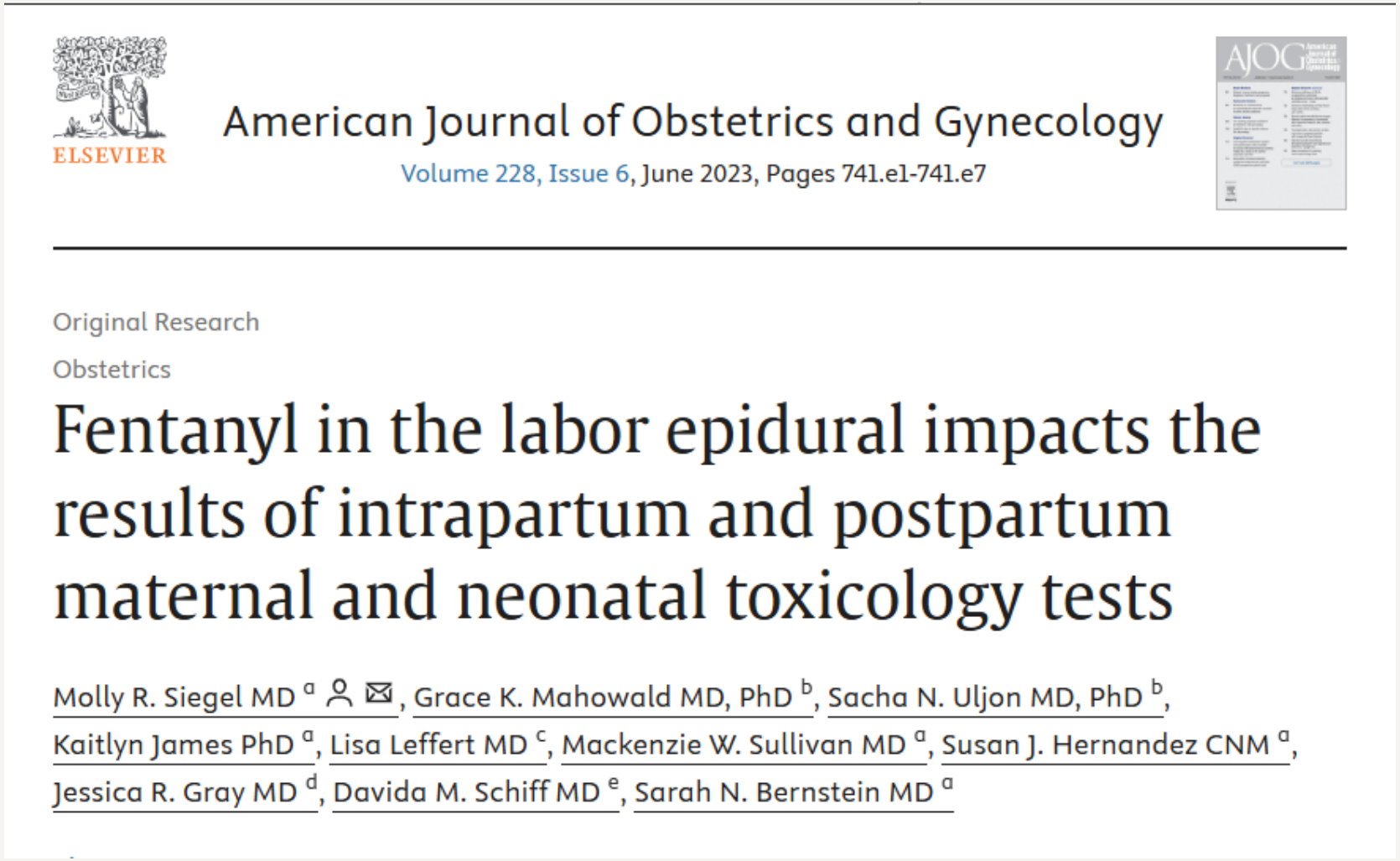
CASE REVIEW

COMMON COMPLEX AND CONFUSING SCENARIOS

Longitudinal Trends and Metabolites Tell a Story

Component Ref Range & Units (hover)	9/9/25 1010	8/19/25 0952	8/14/25 1007	8/11/25 1032
Buprenorphine, Urine	Negative	Negative	Negative	Negative
Ethyl Glucuronide, Urine	Negative	Negative	Comment CM	Comment CM
Amphetamines IA	Negative	Negative	Negative	Negative
Barbiturates, Urine	Negative	Comment CM	Comment CM	Negative
Benzodiazepines, Urine	Negative	Comment CM	Comment CM	Comment CM
Cocaine Metabolite, Urine	Negative	Negative	Negative	Negative
Phencyclidine (PCP), Urine	Negative	Negative	Negative	Negative
Marijuana MTB (THC), Urine	Negative	Negative	Negative	Negative
6-Acetylmorphine, Urine	Negative	Negative	Negative	Negative
Opiates, Urine	Negative	Negative	Negative	Negative
Oxycodone, Urine	Negative	Negative	Negative	Negative
Tapentadol, Urine	Negative	Negative	Negative	Negative
Fentanyl IA	Negative	Negative	Negative	Negative
Methadone, Urine	Negative	Negative	Negative	Negative
Propoxyphene, Urine	Negative	Negative	Negative	Negative
Tramadol, Urine	Negative	Negative	Negative	Negative
Carisoprodol, Urine	Negative	Negative	Negative	Negative
Gabapentin, Urine	Negative	Negative	Negative	Negative
CREATININE, Urine	85	63 CM	144 CM	162 CM
Comment: REFERENCE RANGE: Ref Range>=20				
PH, Urine	5.3	7.4	6.1	6.6
Nitrites, Urine	Negative	Negative CM	Negative CM	Negative CM

Med(ical) History Matters



ELSEVIER

American Journal of Obstetrics and Gynecology

Volume 228, Issue 6, June 2023, Pages 741.e1-741.e7

Original Research

Obstetrics

Fentanyl in the labor epidural impacts the results of intrapartum and postpartum maternal and neonatal toxicology tests

Molly R. Siegel MD [a], Grace K. Mahowald MD, PhD [b], Sacha N. Uljon MD, PhD [b], Kaitlyn James PhD [a], Lisa Leffert MD [c], Mackenzie W. Sullivan MD [a], Susan J. Hernandez CNM [a], Jessica R. Gray MD [d], Davida M. Schiff MD [e], Sarah N. Bernstein MD [a]

Siegel, M. R., Mahowald, G. K., Uljon, S. N., James, K., Leffert, L., Sullivan, M. W., ... & Bernstein, S. N. (2023). Fentanyl in the labor epiduralimpacts the results of intrapartum and postpartum maternal and neonatal toxicology tests. *American Journal of Obstetrics andGynecology*, *228*(6), 741-e1.

Acknowledge Potential Adulterants

Component Ref Range & Units (hover)	9/8/25 1417
Cocaine + Metabolite, Urine	++POSITIVE++ !
Cocaine, Urine	Not Detected
Benzoylecgonine Confirm, Urine	3,229
Cocaethylene, Urine	Not Detected

Comment: Testing Threshold: 50 ng/mL

Component Ref Range & Units (hover)	9/8/25 1417
Fentanyl & MTB, Urine	++POSITIVE++ !
Fentanyl Confirm, Urine	2
Norfentanyl Confirm, Urine	37
Xylazine and Metab, Urine	Negative
Xylazine, Urine	Not Detected
4-Hydroxyxylazine, Urine	Not Detected

Comment: Testing Threshold: 1 ng/mL

Naloxone in UDS is not necessarily indicative of an overdose.

BEST PRACTICES

IMPLEMENTABLE POLICY RECOMMENDATIONS.

Mitigating Risk

- Keeping people engaged in care:
  - Safe, welcoming, harm reduction focused care
  - Developmental evaluations and support
  - Co-housing of pediatric and adult primary care w/ addiction care
  - Attachment focused therapy, family therapy
  - Infant mental health + attachment focused programming
- Safer Use/Family Centered Risk Assessment
  - While parenting? Driving?
  - In the family home? Safe storage?
  - Counseling about exposure risk (turmeric and salt video)
  - Other non using people around?

ACOG & SMFM screening recommendations

- Universal screening with a validated questionnaire for substance use disorders as the initial prenatal visit "in partnership" with the patient and periodically throughout care is **recommended**
- Universal biological testing to screen pregnant women is **not recommended**

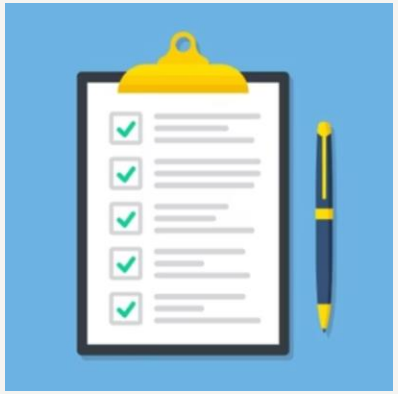
Arguments against universal biological screening

- Biological tests cannot detect the frequency or severity of the substance use
- False-positive test results can occur resulting in devastating legal consequences
- Biological drug tests are not indicative of a person's ability to effectively care for and parent their child
- May not reduce bias concerning toxicology testing, treatment and child welfare reporting

Slide adapted from Camden Coalition (Laura Sorenson/Michelle Adyniec)

Verbal Screening

*4 Ps Validated Screening Tool



Parents	Did either of your parents ever have a problem with alcohol or drugs?
Partner	Does your partner have a problem with alcohol or drugs?
Past	In the past did you ever struggle with alcohol or drugs?
Present	In the past month have you used any alcohol? Other drugs?

*Ewing H. A practical guide to intervention in health and social services with pregnant and postpartum addicts and alcoholics: theoretical framework, brief screening tool, key interview questions, and strategies for referral to recovery resources. Martinez (CA): The Born Free Project, Contra Costa County Department of Health Services; 1990

ACOG Committee Opinion No. 711, Opioid Use and Opioid Use Disorder in Pregnancy, 2017.

ACOG Committee on Health Care for Underserved Women; American Society of Addiction Medicine.

Informed Consent

- **Informed oral and written consent** should be obtained from the mother before testing her or her infant for substances.

- Reason/s for **why** screening is being performed should be explicitly explained to patient.
- Provider should explain **how** test results will be used.
- Explain the **procedure** for testing and offer **options** whenever possible.
- Address all questions/concerns.

Polak, K., Kelpin, S., & Terplan, M. (2019). Screening for substance use in pregnancy and the newborn. Seminars in Fetal and Neonatal Medicine, 24(2), 90–94. https://doi.org/10.1016/j.siny.2019.01.007

Slide adapted from Camden Coalition (Laura Sorenson/Michelle Adyniec)

Breastfeeding/Chestfeeding

Summary of Recommendations

1. Center the mother/birth parent's desires. Provide information about benefits and considerations for all feeding options. Offer support for the mother/birth parent's decision.
2. Chest/breastfeeding is good for birth parents and babies, even when there has been recent prenatal substance use.
3. Lactation is safe and recommended with Medications for Opioid Use Disorders (MOUDs).
4. Harm reduction education and strategies are more effective than abstinence-only messages and strategies.
5. Using a substance again after a period of reduction or abstinence happens. Parents need information about what they can do to keep their baby safe when this happens.
6. Pumping and discarding milk after substance use can protect infants from substance exposure. It is not necessary to permanently discontinue chest/breastfeeding after substance use.

WA State Department of Health; Lactation and Substance Use: Guidance for Health Care Professionals; 141-087 LactationAndSubstanceUseGuidanceForHealthCareProfessionals

Take Away Points

- Toxicology results must be interpreted as a *single data point* in a patient's story
- Drug testing should be interpreted by a *trained individual in the context of patient history and medication list.*
- Confirmatory testing is essential for any unexpected positive results from immunoassay testing.
- Moving toward family and situationally specific safety analysis is preferrable to using toxicologic data to determine child permanency or safety of parenting.

Thank you! Questions?