Under-identification of prenatal substance exposure: Implications for child safety

SIG Summer 2025

Sarah Font

Contact me: font@wustl.edu

The Problem

- Up to **15%** of births involve prenatal substance exposure
- **5-12%** of mothers on Medicaid have a substance use disorder during the prenatal period
- But, only about **1-1.5%** of births nationally have a prenatal exposure diagnosis or are counted as a “substance affected infant” (per federal CM report)

Vast differences across state

Not plausible these are solely driven by differences in substance use during pregnancy

Note: CA and NJ do not include exposure in their definitions of abuse/neglect. Illinois changed their policy in 2023 to no longer include. All other states shown do (or did in this time frame).

But this should not affect the number of notifications!

	2022 total births	"Substance affected" CM 2023	Rate per 1,000
Arkansas	35471	1797	50.66
California	419104	2974	7.10
Louisiana	56479	2140	37.89
Illinois	128350	615	4.79
Minnesota	64015	1431	22.35
New Jersey	102893	364	3.54
Colorado	62383	657	10.53
U.S.	3,667,758	44,453	12.12

Not necessarily driven by differences in definitions

In Arkansas:

Infant born with and affected by:

(A) A fetal alcohol spectrum disorder;

(B) Maternal substance abuse resulting in prenatal drug exposure to an illegal or a legal substance; or

(C) Withdrawal symptoms resulting from prenatal drug exposure to an illegal or a legal substance.

Garrett's Law – neglect includes newborn w/ illegal substances in body or health problem due to maternal use in prenatal period

Non-investigative notifications for other substance affected infants

In New Jersey:

An infant:

(1) whose mother had a positive toxicology screen for a controlled substance or metabolite thereof during pregnancy or at the time of delivery;

(2) who has a positive toxicology screen for a controlled substance after birth which is reasonably attributable to maternal substance use during pregnancy;

(3) who displays the effects of prenatal controlled substance exposure or symptoms of withdrawal resulting from prenatal controlled substance exposure;

or (4) who displays the effects of a fetal alcohol spectrum disorder (FASD).

Are doctors intentionally not detecting?

Quoting from a 2024 article in the Florida Pheonix: States, hospital systems try less punitive drug testing of pregnant women and newborns

The data about bias in child welfare reporting related to pregnant/birthing people's substance use has been around for decades," Sarah Roberts, a legal epidemiologist and professor at the University of California, San Francisco....

What's changed, Roberts said, is **a growing awareness of the harms of over-testing and over-reporting to child welfare agencies**.

[few states require mother/newborn testing...] But hospitals and clinicians are often confused about their own state laws, said Joelle Puccio, director of education at the Academy of Perinatal Harm Reduction, which provides information to pregnant women and parents who use drugs.

"What actually happens is always more punitive, more surveillance than what is actually required by the law, and it always falls more heavily on Indigenous, Black, and other families of color," said Puccio, who has worked as a registered nurse in perinatal and neonatal intensive care for two decades.

The problem with doctors' discretion

- Little training on substance use in general; no uniform expertise on the nexus of addiction and parenting
- Only observe the mother/newborn in a highly supervised, tightly controlled environment
- No access to child welfare history, which should inform risk assessment
- In the past decade, medical journals have almost exclusively published commentaries and research arguing against reporting and characterizing CW as more harmful than helpful

Discretion and local (hospital) policy affects:

- Quality of screening during the prenatal period
  - If done, review of medical history vs. self report only
- Toxicology testing of mother
  - If done, timing /frequency
- Toxicology testing of child at birth
  - If done, manner of testing (urinalysis, meconium, umbilical cord)

- Depending on the state – “affected” label decision to “notify” child welfare

How much is missed? (And this is likely still an undercount)

Disclaimer: Pennsylvania DHS shared data for this analysis but is not responsible for the accuracy or interpretation of findings.

Table 1. Prenatal Substance Exposure Indicators and Cumulative Estimates (2015-2018)

Pennsylvania children with a confirmed CWS case by 36 months of age

	Pct. with indicator	Unique Pct. Added
Any PSE Indicator	**45.38**	
CWS substance-affected infant determination	8.92	8.92
Child Medicaid: withdrawal symptoms	9.56	6.57
Child Medicaid: other PSE diagnosis	5.37	4.03
Mother Medicaid: substance use complicating pregnancy diagnosis	26.2	12.99
Mother Medicaid in prenatal period (PNP): overdose	0.71	0.09
Mother Medicaid in PNP: medication assisted treatment (MAT) for opioid use disorder	11.67	1.18
Mother Medicaid in PNP: any substance use disorder	34.74	7.15
Mother Medicaid in PNP: substance use service, consultation, or positive drug screen	18.1	0.77
CWS case for "caregiver substance use" or removal reason of parent alcohol or drug abuse in month of child's birth (excluding SAI determinations)	14.65	3.69

Why it matters: Avoidance of child welfare involvement at birth may just delay until harm escalates

In PA, we applied our counts of PSE within child welfare to the full Medicaid birth population.

We estimate that 70% or more of Medicaid-born children with PSE will have a confirmed abuse or neglect case by age 3 even though most were not considered “substance affected” at birth

Implications for Legislation & Guidelines

- Clear standards for whether and when testing is recommended or required (or universal testing)
- Notification requirement should apply to a broad range of indicators, including:
  - Physical symptoms of withdrawal or exposure (incl. FASD)
  - Positive toxicology of mother during prenatal period
  - Positive toxicology of child at birth
  - Other evidence of maternal misuse during the prenatal period
- Why?
  - Toxicology tests are important but limited, especially urinalysis
  - Many infants will not show obvious symptoms of exposure at birth
  - Detection/labeling of physical symptoms can be subjective
  - Physical signs of exposure are not necessary for the parent's ongoing substance use to pose a risk

Statutes that explain doctors' obligation to detect drug use

- States that mandate drug testing of **pregnant women** in certain circumstances (e.g., complications during birth that point to the possible use of drugs or alcohol)
  - Minnesota, North Dakota

- States that mandate drug testing of **newborns** in certain circumstances
  - Louisiana, Minnesota, North Dakota, and Wisconsin

North Dakota

North Dakota Century Code Title 50. Public Welfare § 50-25.1-17. Toxicology testing--Requirements

1. If the woman has obstetrical complications that are a medical indication of possible use of a controlled substance for a nonmedical purpose or alcohol misuse, upon the consent of the pregnant woman, or without consent if a specimen is otherwise available, a physician shall administer a toxicology test to a pregnant woman under the physician's care or to a woman under the physician's care within eight hours after delivery to determine whether there is evidence that she has ingested a controlled substance or alcohol. If the test results are positive, the physician shall report the results under section 50-25.1-03.1. A negative test result or the pregnant woman's refusal to consent to a test does not eliminate the obligation to report under section 50-25.1-03 if other evidence gives the physician reason to believe the patient has used a controlled substance for a nonmedical purpose or has engaged in alcohol misuse.

2. If a physician has reason to believe based on a medical assessment of the mother or the infant that the mother used a controlled substance for a nonmedical purpose or engaged in alcohol misuse during the pregnancy, the physician shall administer, without the consent of the child's parents or guardian, to the newborn infant born under the physician's care a toxicology test to determine whether there is evidence of prenatal exposure to a controlled substance or alcohol. If the test results are positive, the physician shall report the results as neglect under section 50-25.1-03. A negative test result does not eliminate the obligation to report under section 50-25.1-03 if other medical evidence of prenatal exposure to a controlled substance or alcohol misuse is present.

Louisiana

- Art. 610 – if a physician has cause to believe that a newborn was exposed in utero to an unlawfully used controlled substance, the physician shall order a toxicology test upon the newborn, without the consent of the newborn's parents or guardian, to determine whether there is evidence of prenatal neglect. If the test results are positive, the physician shall issue a report. If there are symptoms of withdrawal in the newborn or other observable and harmful effects in his physical appearance or functioning that a physician has cause to believe are due to the chronic or severe use of alcohol by the mother during pregnancy or are the effects of fetal alcohol spectrum disorder, the physician shall issue a report.
- § 40:1086.11; § 1135 – if a newborn exhibits symptoms of withdrawal or other observable and harmful effects in his physical appearance or functioning that a physician believes are due to the use of a controlled substance, in a lawfully prescribed manner by the mother during pregnancy, the physician shall make a notification to the department of children and family services on a form developed by the department. Such notification shall not constitute a report of child abuse or prenatal neglect, nor shall it require prosecution for any illegal action.

Absent legislation – possible approaches to improve detection

- Use your state Medicaid data to understand the scope and nature of the problem
  - How many likely-exposed infants being missed?
  - What happens to exposed infants when doctors do or do not detect/report? (e.g., subsequent abuse, neglect, fatality)
  - Are there particular hospitals that routinely miss (or fail to notify about) high-risk cases?
- **Share findings** with hospitals and providers
  - They don't necessarily see what happens in the longer-term if they do or do not make the call
  - Opportunity to dispel misconceptions about child welfare practice