

Inequities among Opioid-Exposed Mother-Infant Dyads Affected by Neonatal Abstinence Syndrome in Pennsylvania



Defining Neonatal Abstinence Syndrome (NAS)

In 2018 and 2019, Pennsylvania's Department of Health received case reports of all infants born in-state to Pennsylvania residents who had in-utero exposure to opioids, NAS diagnosis, and at least one symptom compatible with NAS, such as body shakes or tremors, excessive or high-pitched cry, or low weight gain.

In-utero opioid exposure



NAS diagnosis



≥ 1 symptom of NAS



Characteristics of Mothers of Infants with NAS

When compared to all other mothers in Pennsylvania, mothers of infants with NAS were *more* likely to be:



Non-Hispanic White



Insured by Medicaid at birth



25-34 years old
Age 25 to 34



Smoking during pregnancy



Living in zip codes with low median household annual income

When compared to all other mothers in Pennsylvania, mothers of infants with NAS were *less* likely:



To have received prenatal healthcare during pregnancy



To be college educated

Root Causes of Inequities

While there are many different factors that influence maternal substance use, policies and systems which perpetuate bias, stigma, and income and opportunity inequalities are also determinants of health.

These factors may marginalize people using substances as well as impact pregnant people's health outcomes and likelihood of seeking or receiving care or treatment.

Key Takeaways

- Social factors, including residing in a zip code with low median household annual income and having only a high school education, were associated with opioid use during pregnancy and giving birth to an infant with NAS during 2018-2019
- System-level strategies that reduce inequities in income and opportunity, address economic and social policies that perpetuate bias and stigma, and promote equitable access to healthcare and treatment during pregnancy are needed to promote maternal and infant health
- Additional supports are also needed among pregnant people using opioids during pregnancy to facilitate entry into prenatal care and promote smoking cessation

Reference: Decker, C. M., Mahar, M., Howells, C. L., Ma, Z. Q., Goetz, C. T., & Watkins, S. M. (2023). Demographics, Birth Parameters, and Social Determinants of Health Among Opioid-Exposed Mother-Infant Dyads Affected by Neonatal Abstinence Syndrome in Pennsylvania, 2018–2019. *Maternal and Child Health Journal*, 1-10. <https://link.springer.com/article/10.1007/s10995-023-03678-5>

For more data and resources related to NAS in Pennsylvania, visit:

<https://www.health.pa.gov/topics/programs/Newborn-Screening/Pages/NAS.aspx>

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