

The Social Context of Neonatal Abstinence Syndrome



https://www.rand.org/pubs/external_publications/EP67785.html



THE ISSUE

Many babies born after being exposed to opioids have neonatal abstinence syndrome (NAS), a drug withdrawal syndrome that occurs shortly after birth. Infants with NAS can have symptoms severe enough to require treatment with a medication like morphine, often involving the NICU; their care costs on average over \$50,000. Likely reflecting the prevalence of opioid misuse among child bearing women, rates of NAS increased nearly sevenfold from 2000 to 2014. An infant is now born with NAS about every 15 minutes.



STUDY FOCUS

To understand how health care provider shortage and long-term economic conditions affect rates of NAS, researchers analyzed information from about 6.3 million births from 2009 to 2015 in 580 counties across eight states: Florida, Kentucky, Massachusetts, Michigan, North Carolina, New York, Tennessee and Washington.



KEY FINDINGS

- The rate of babies born with NAS varied across the 580 counties examined, but rates were often highest in the most rural counties.
- Higher NAS rates were linked to high long-term unemployment rates: counties with the highest unemployment rates had NAS rates over 2.5 times greater than counties with the lowest rates. The impact of high long-term unemployment was greatest in the most rural counties.
- Counties with shortages of mental health workers also had significantly more NAS cases than counties without shortages. The shortage had more profound effects in urban counties.



IMPLICATIONS FOR POLICY

The opioid crisis is more than just a health problem: it is affected by a community's economic conditions. While specific approaches will vary by community, a revitalized economy and social safety net may also have important benefits for a community's health.

We face an uphill battle addressing the opioid crisis until we are providing better access to effective mental health care. Clinician training programs targeting communities in shortage areas, telehealth, loan forgiveness programs, and integrated collaborative care models that enhance both access and quality all have the potential to increase access to effective mental health care.

An interactive tool based on study findings can help decisionmakers explore how changing a county's economic conditions or the supply of mental health providers could affect the county's NAS rate. (<https://www.rand.org/pubs/tools/TL327.html>)

Patrick, S. W., Faherty, L. J., Dick, A. W., Scott, T. A., Dudley, J., & Stein, B. D. (2019). Association Among County-Level Economic Factors, Clinician Supply, Metropolitan or Rural Location, and Neonatal Abstinence Syndrome. *JAMA*, 321(4), 385-393.

