

Analysis Brief

Costs Associated with Neonatal Abstinence Syndrome, 2021

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Background

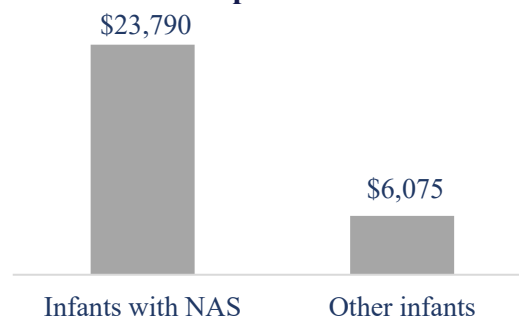
Neonatal Abstinence Syndrome (NAS) is a withdrawal syndrome that can occur in newborns following prenatal exposure to opioids or other drugs of addiction. Over the past decade, the incidence of NAS has been increasing in Alaska.¹ NAS has emotional and physical impacts on affected newborns and families. With often longer hospital stays and specialized medical services that may be provided, costs of care for newborns with NAS are higher than for their unaffected peers.²

To estimate financial costs of NAS in Alaska, this analysis calculated the 2021 calendar year total expenditures of the Medicaid program on care and services provided during the first 30 days of life among NAS- and non-NAS-affected newborns. The Division of Health Care Services provided data. Expenditures are summarized by the date the claim was paid to reflect costs incurred during 2021 rather than the date of service. NAS-affected infants were defined as those with a P96.1 billing code within the first 14 days of life.

Key Findings

- In 2021, Alaska Medicaid paid a total reimbursement of \$66.96 million for 28,520 claims associated with 5,018 infants.³
- \$4.87 million (7.3% of all reimbursements) was associated with infants with NAS.
 - 2.4% of all infants had at least one NAS-related claim (n=121).
 - 4.1% of all claims (n=1,175) were associated with infants with NAS.
- Infants with NAS had 1.7 times (70% higher) as many total claims per individual than other infants with claims paid by Medicaid (9.7 vs. 5.6 claims per individual).
- In a typical case, Medicaid paid 3.9 times as much per infant for those affected by NAS compared to non-NAS-affected infants.

Figure: Median cost per individual



Implications and Recommendations

Cost of care was **nearly 300% higher** for NAS-affected newborns in 2021 compared to their unaffected peers.

Recommended best practices for reducing the incidence and cost of care for NAS-affected newborns include:

- a) **Universal screening** by health care providers, using a validated screening tool and evidence-based brief intervention, with referral to treatment as needed, for all:
 - women of childbearing age for risk of unintended pregnancy prior to prescribing opioids; and
 - pregnancies for use of substances in the first trimester and again around the time of birth.
- b) Promotion of **Medication Assisted Treatment** for people reporting use of opioids during pregnancy.
- c) Appropriate adoption of **non-pharmacologic treatments** for newborns with NAS.

¹ Neonatal Abstinence Syndrome among Medicaid-Eligible Births — Alaska, 2004–2015. State of Alaska Epidemiology Bulletin, February 2017. Available at http://www.epi.alaska.gov/bulletins/docs/b2017_05.pdf.

² Strahan, A. E., Guy, G. P., Jr, Bohm, M., Frey, M., & Ko, J. Y. (2020). Neonatal Abstinence Syndrome Incidence and Health Care Costs in the United States, 2016. *JAMA pediatrics*, 174(2), 200–202.

³ The data reported is on the calendar year and some variation may be seen compared to fiscal year data.