Opioids in Pregnancy\textsuperscript{1,2}

**Exposure** can occur from:

- Proper use of clinician prescribed opioids for pain relief
- Misuse or abuse of prescription opioids
- Illicit use of heroin or nonpharmaceutical formulations of fentanyl
- Medication-assisted treatment (MAT) with methadone or buprenorphine for opioid use disorder (OUD)

**333\%**

Increase in opioid use disorder in pregnant women from 1999 to 2014

**0.7** per 1,000 delivery hospitalizations in Washington D.C.

**48.6** per 1,000 delivery hospitalizations in Vermont

Substantial range of prevalence over 28 states in 2014

- Maine
- New Mexico
- Vermont
- West Virginia

Highest average annual rate increases of opioid use disorder

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Neonatal Abstinence Syndrome (NAS)\textsuperscript{2,3}

**433\%**

Increase in NAS nationally in 10 years from 2004 to 2014 among all insurance payers

**7x greater**

NAS is increasingly and disproportionately affecting infants covered by Medicaid versus private insurance in 2014

**Every 25 minutes**

One NAS-affected infant born in the U.S. in 2012

**Low birth weight**

**Respiratory difficulties**

**Feeding difficulties**

**Seizures**

Co-morbidities more prevalent among infants with NAS in addition to withdrawal symptoms, prolonging hospital stays

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Cost of NAS on Healthcare\textsuperscript{3}

The disproportionate increase in NAS causes strain on Medicaid, as well as state and federal budgets

**2.1 days**

Mean length of hospital stay for term infant, 2012

**16.9 days**

Mean length of hospital stay for infant with NAS, 2012

**$3,700**

Mean cost of hospitalization for term infant, 2011-2014

**$19,340**

Mean cost of hospitalization for infant with NAS, 2011-2014

**606\%**

Increase in cost of NAS paid by Medicaid from 2004 to 2014

**$2.5 billion**

Total hospital costs associated with care of infants with NAS enrolled in Medicaid, 2004-2014, over $2 billion more than if none of these infants had developed NAS

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What Can You Do?\textsuperscript{1,2,3}

**Public health measures** can help reduce NAS

- Promote responsible opioid prescribing
- Prevent opioid dependence before and during pregnancy
- Screen and treat during pregnancy
- Decrease unplanned pregnancies among opioid users
- Ensure access to family planning and preconception care for women who use opioids
- Arrange for pregnant OUD patients to deliver at facilities prepared to monitor and care for infants with NAS
- Standardize postnatal nonpharmacologic and pharmacologic treatments for infants with NAS
- Target interventions at low-income mothers and infants
- Multidisciplinary approach without criminalization

The **American Academy of Pediatrics** Clinical Reports, Technical Reports, and Policy Statements can help guide evidence-based care

- [Neonatal Drug Withdrawal](#)
- [Prenatal Substance Abuse: Short- and Long-term Effects on the Exposed Fetus](#)
- [A Public Health Response to Opioid Use in Pregnancy](#)
References

