



MATERNAL OPIATE USE AND OPIATE-AFFECTED NEWBORNS

Children's Justice Initiative Conference
Bloomington, MN
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Study Design and Limitations

- Design links claims info about mother and newborn, plus links to birth record.
- Includes data on prescribed opiates and medication assisted therapy (MAT).
- Makes use of existing data from claims and birth records.

Study Design and Limitations

- Medicaid data only; it likely shows about 80% of opiate-affected births in the state.
- Detailed information but not up-to-the minute; includes outcome info from birth records but there's a wait involved in accessing this.
- Under-reporting of information from claims and birth records may understate findings.

Study Design and Limitations

- It offers two “windows” illuminating maternal opiate use:
 - moms diagnosed with opiate dependency
 - moms of newborns diagnosed with NAS (opiate withdrawal or toxicity)

Not all mothers of NAS babies are diagnosed before birth as being dependent on opiates, and...

Not all pregnant women dependent on opiates give birth to NAS babies...

Therefore, opiate dependency in some percentage of pregnancies will remain unknown.....

PREVALENCE OF NEONATAL ABSTINENCE SYNDROME AND MATERNAL OPIOID ABUSE DURING PREGNANCY

Minnesota Health Care Programs



Definitions

- Minnesota Health Care Programs (MHCP)
 - Combination of Medical Assistance and MinnesotaCare.

Definitions

- Neonatal Abstinence Syndrome (NAS)
 - Is drug withdrawal in newborns following birth.
 - NAS is characterized by a wide array of symptoms including increased irritability, hypertonia, tremors, feeding intolerance, watery stools, seizures, and respiratory distress, etc.

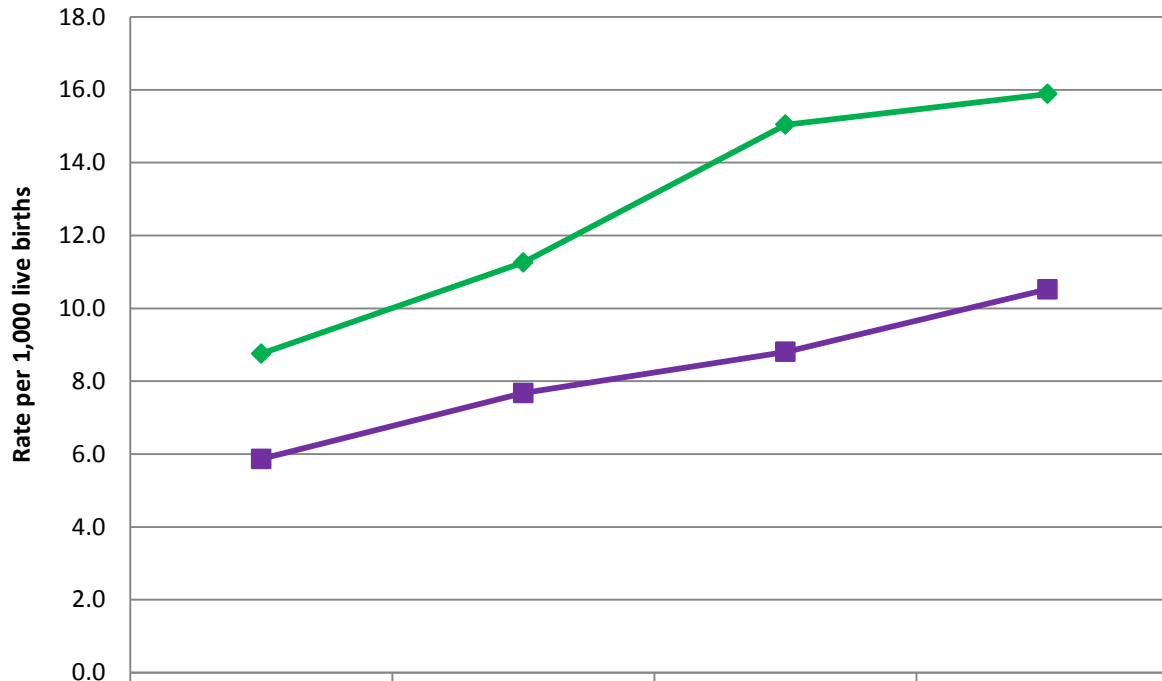
Definitions

- Maternal Opioid Abuse
 - Is based on the mother having a health claim with a diagnosis of opioid substance abuse or dependence in the 10 months before delivery through 2 months after delivery.

Definitions

- Race and Ethnicity is based on maternal race and was acquired from the birth record.

MHCP Prevalence Maternal Opioid Abuse and NAS, 2009-2012



	2009	2010	2011	2012
Maternal Opioid Abuse	8.8	11.3	15.0	15.9
NAS	5.9	7.7	8.8	10.5

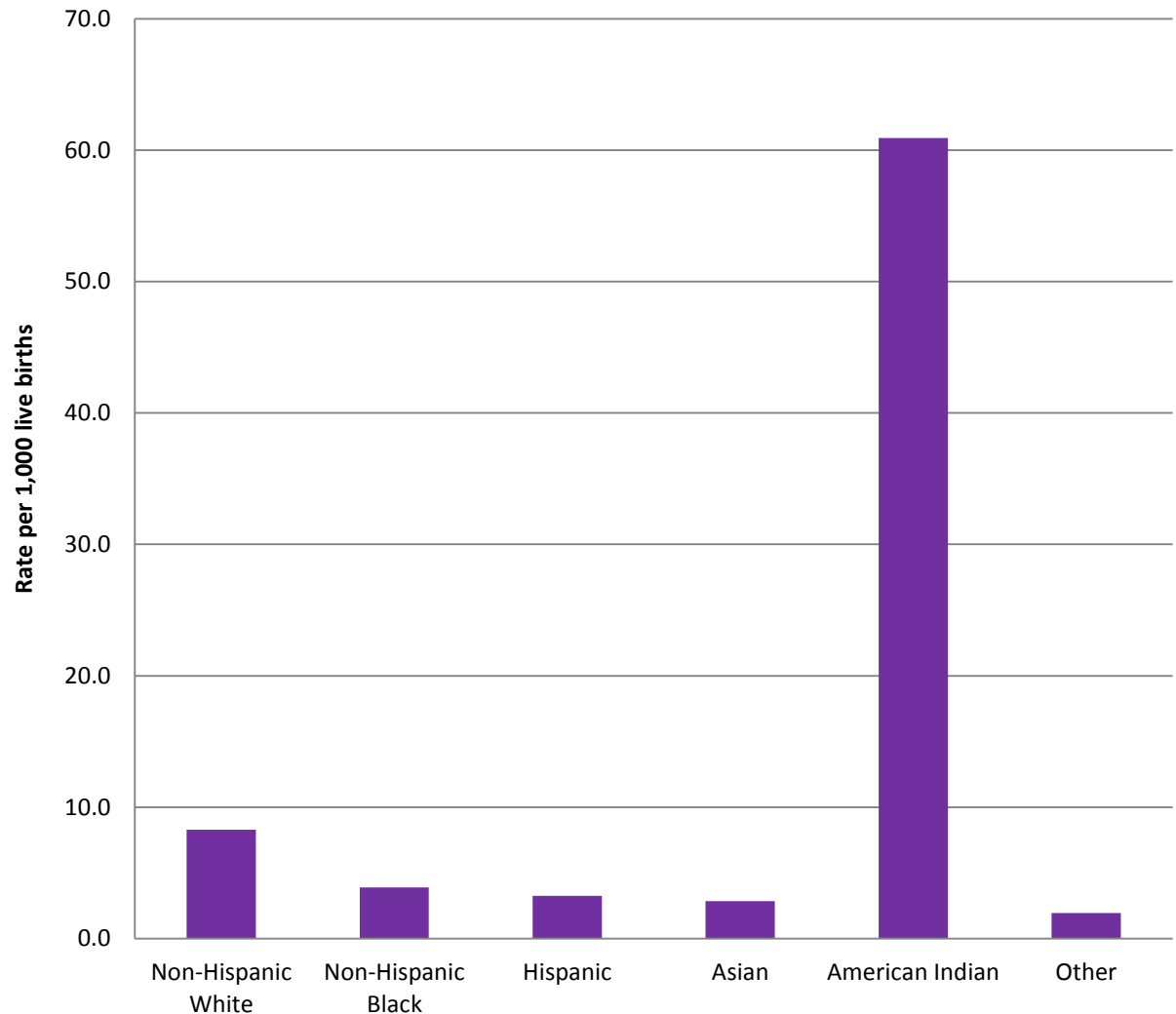
- From 2009 to 2012 both maternal opioid abuse diagnosis and infant NAS diagnosis has almost doubled.
- Of those diagnosed with maternal opiate abuse, 80% had the first diagnosis noted 0-10 months prior to delivery, while in 20% the first diagnosis occurred at the time of delivery or in the first two months postpartum.

NAS Infants

Compared to non-Hispanic whites, American Indian Infants are 7.4 times more likely to be born with NAS.

Over a quarter of all NAS newborns are American Indian.

Rates of NAS by Race/Ethnicity, 2009-2012

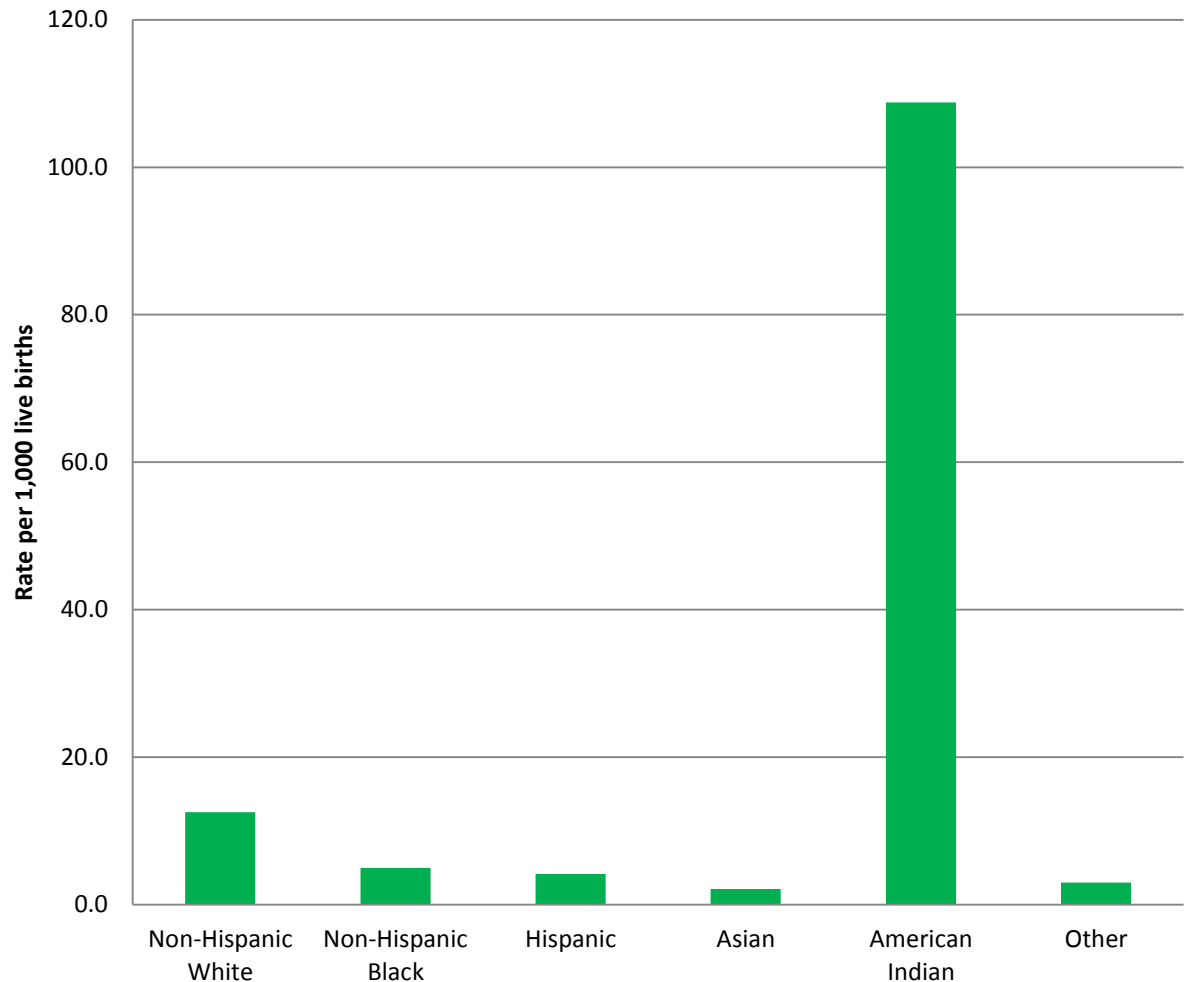


Maternal Diagnosis of Opioid Abuse

Compared to non-Hispanic whites, American Indian women are 8.7 times more likely to be diagnosed with maternal opiate dependency or abuse during pregnancy.

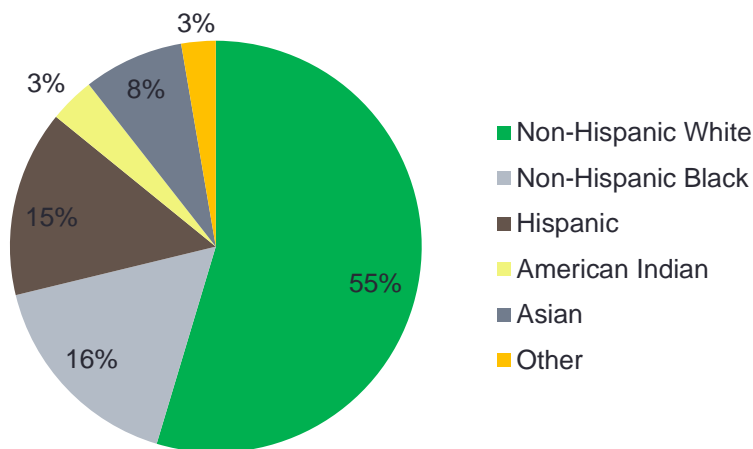
More than one in ten pregnancies among American Indian women have a diagnosis of opiate dependency or abuse during pregnancy.

Rates of Maternal Opioid Abuse by Race/Ethnicity, 2009-2012

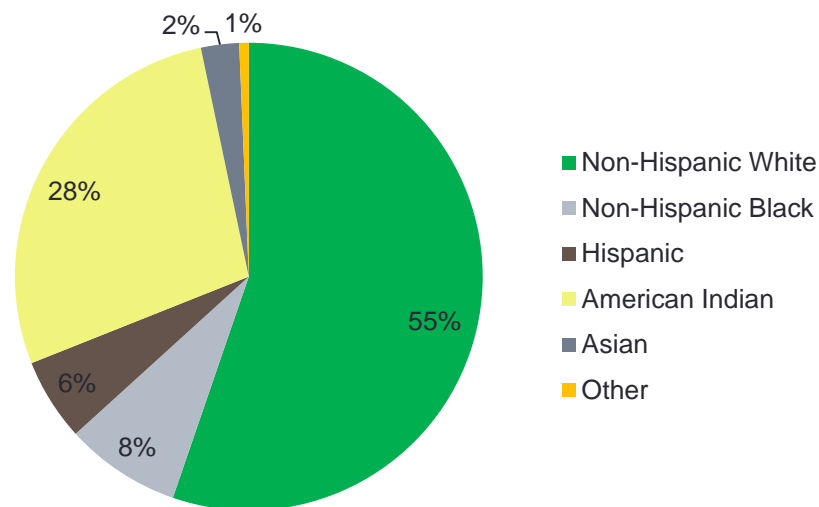


Racial Ethnic Distribution in MHCP Births

All MHCP Births, 2009-2012



MHCP NAS Births, 2009-2012



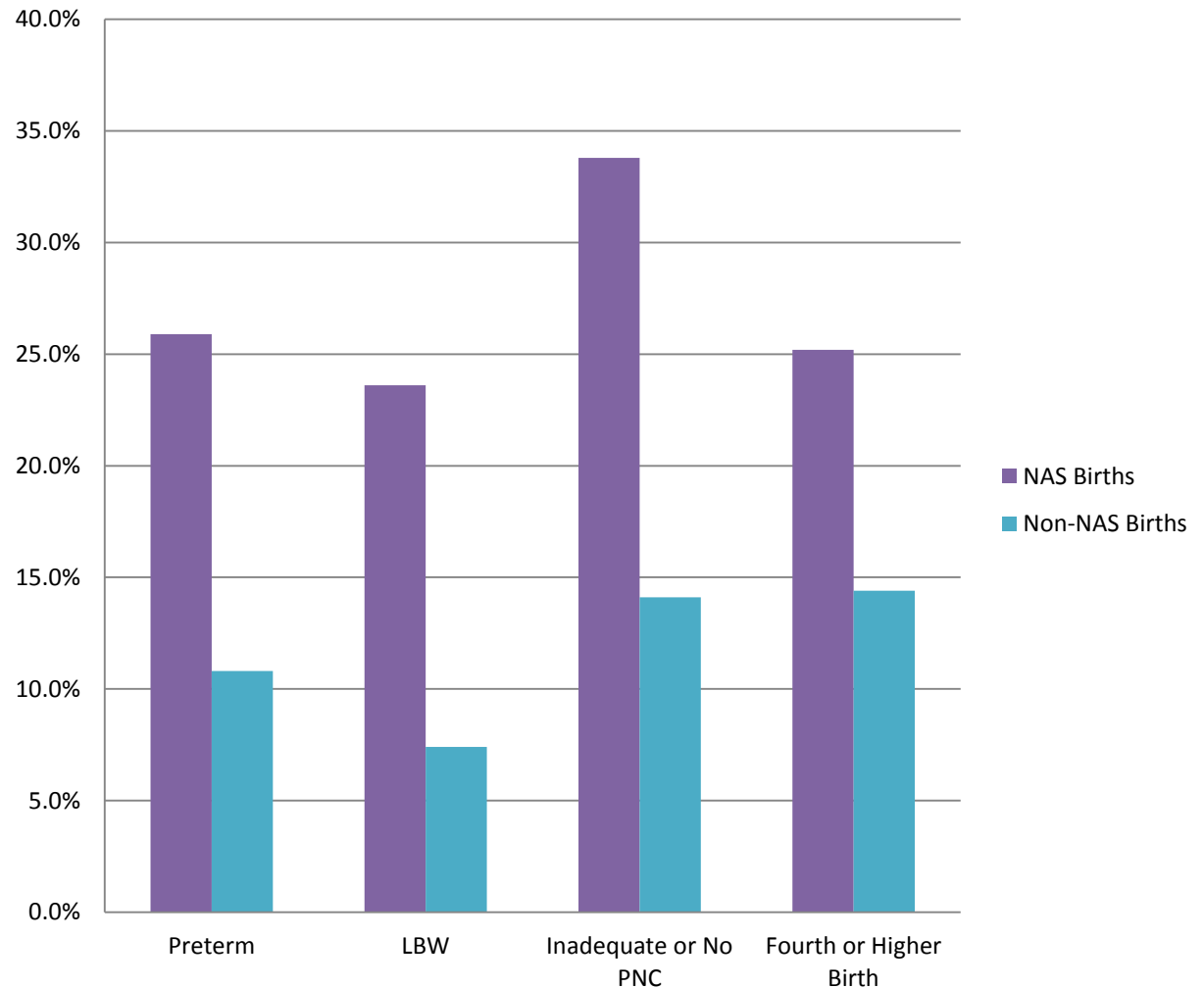
American Indian Infants bear a disproportionate burden of NAS.

MCH Outcomes

NAS infants are more likely to be born preterm, low birth weight (LBW), and have inadequate or no prenatal care (PNC). They are also more likely to be a higher parity.

Mothers of NAS newborns are 12 times more likely to have not received any prenatal care.

Difference between NAS Infants and Non-NAS Infants, 2009 - 2012

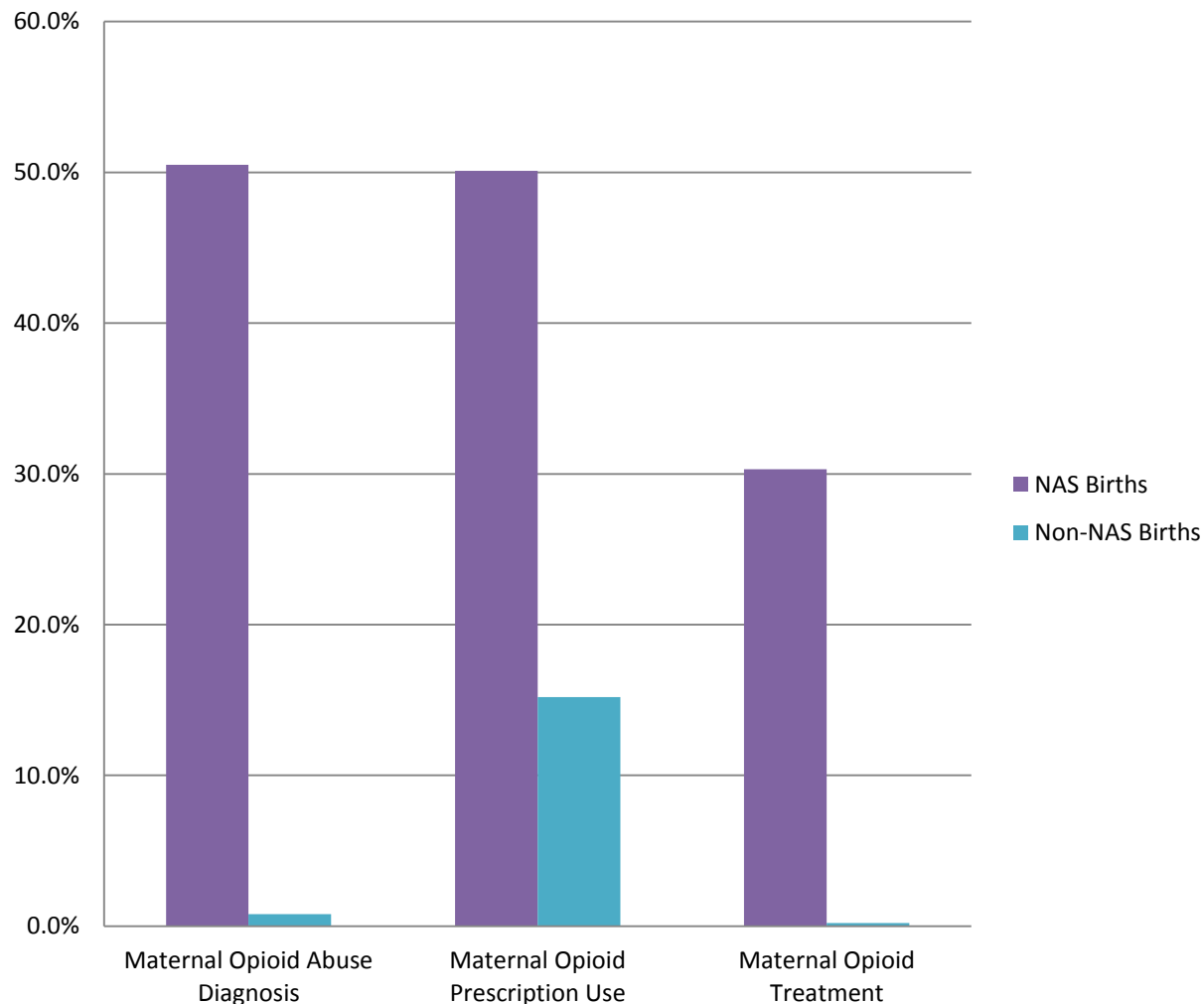


Maternal Opioid Use

66 percent of NAS infants had some type of Opioid exposure (diagnosis, prescription, or treatment) during pregnancy

58 percent of moms on Methadone or Buprenorphine treatment had a NAS infant

Difference between NAS Infants and Non-NAS Infants, 2009-2012

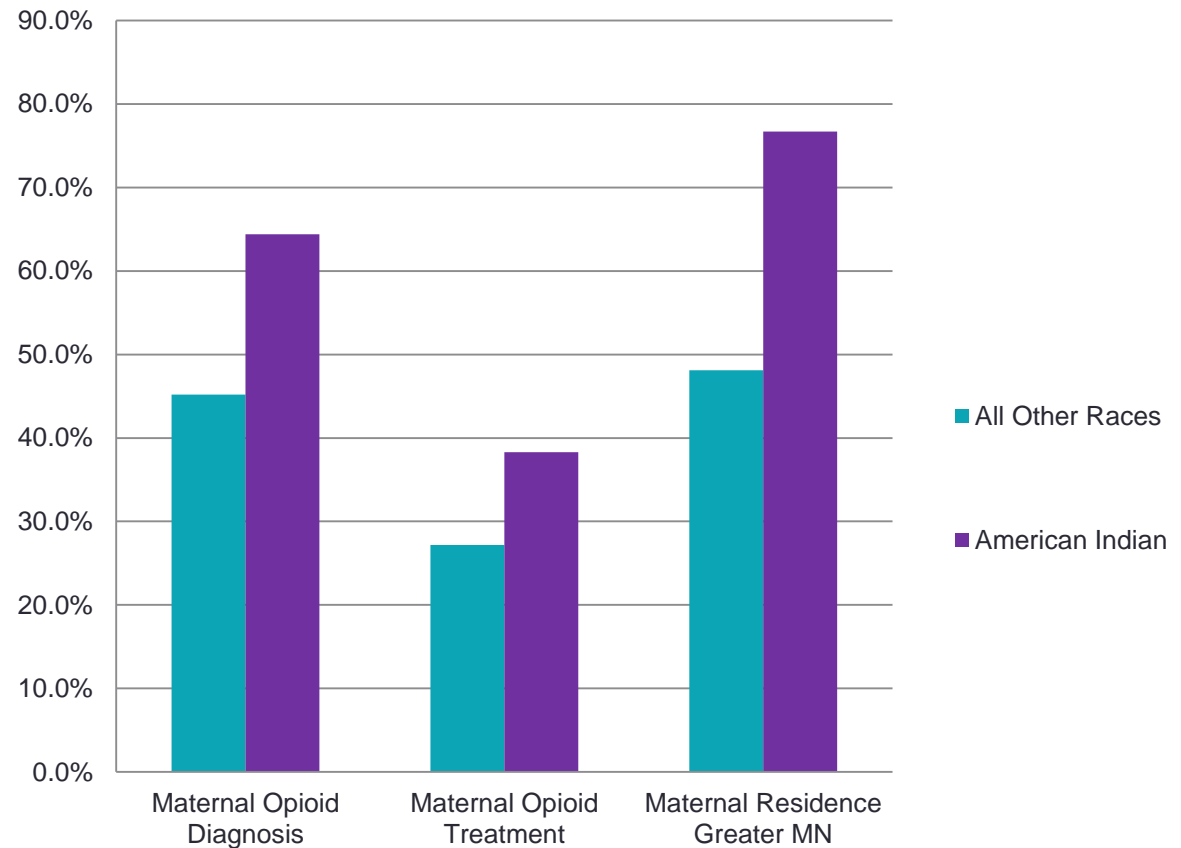


NAS Infants

American Indian NAS infants are more likely to have a mother diagnosed with Opioid Substance Abuse and Opioid treatment during pregnancy.

78 percent of American Indian mothers of NAS infants live in Greater Minnesota.

NAS Births - Difference between American Indians and all other race/ethnicities, 2009 - 2012

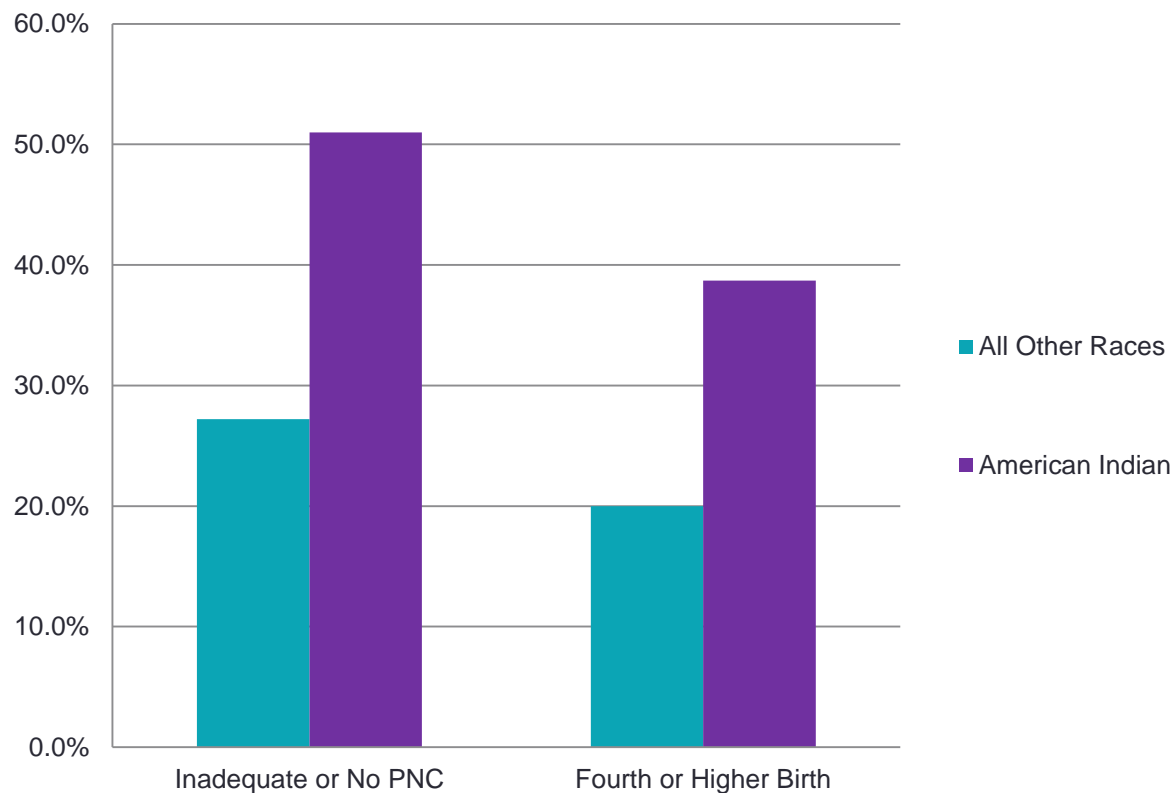


NAS Infants

American Indian NAS infants are more likely to have a mother who received no or inadequate prenatal care (PNC)

38 percent of American Indian NAS infants are the fourth or higher birth for that mother.

NAS Births - Differences between American Indians and all other race/ethnicities, 2009 - 2012



American Indian Mothers

During pregnancy American Indian mothers with a diagnosis of Opioid Substance Abuse

- 38 percent has an infant born with NAS
- 41 percent were on Opioid Treatment
- 57 percent had an opioid prescription

American Indian Mothers with and without Opioid Abuse Diagnosis during Pregnancy, 2009-2012

