



PREGNANCY RISK ASSESSMENT MONITORING SYSTEM

SAFE SLEEP PRACTICES AMONG AMERICAN INDIAN MOTHERS

OKLAHOMA FACTS

36.7%

of non-Hispanic AI/AN infants died due to **SUID** between 2019 and 2021.¹

50.8%

of non-Hispanic AI/AN infants **slept alone** (Figure 2).

80.5%

of non-Hispanic AI/AN infants were **placed on their back to sleep** (Figure 3).

Infant mortality is one way to assess the health of a community. While the infant mortality rate (IMR) has decreased in recent years, Oklahoma still exhibits a relatively high rate. For 2019-2021, Oklahoma had an IMR of 6.6 per 1,000 live births, while the rate for the United States was 5.5 per 1,000 live births.¹ A noticeable trend in infant mortality is the differences observed among racial and ethnic groups. In Oklahoma, non-Hispanic (NH) American Indian/Alaska Native (AI/AN) mothers had the third highest IMR at 7.2 per 1,000 from 2019-2021.¹ Among NH AI/AN infants, one of the leading causes of infant death is sudden infant death syndrome (SIDS), which occurs when an infant suddenly dies due to an unknown cause.² SIDS falls under the umbrella term sudden unexpected infant death (SUID), which encompasses deaths from both known (e.g. accidents or injuries) and unknown causes.² In Oklahoma, SUID and SIDS-related infant deaths were most prevalent among NH AI/AN mothers.¹ These variations suggest cultural practices may play a role in SUID and SIDS rates.

Unsafe sleep environments and practices are risk factors for SUID and SIDS.³ The American Association of Pediatrics (AAP) has safe sleep guidelines to prevent these deaths. Safe sleep environments include using a crib or a sleep sack. Unsafe sleep environments include pillows, toys, mattress toppers and loose bedding. These guidelines emphasize placing infants on their backs to sleep every time and using a firm, flat sleep surface to prevent wedging and suffocation.⁴ The sleeping area should also be free of any items such as toys, comforters, pillows, mattress toppers, and loose bedding such as nonfitted sheets and blankets. The use of unsafe items can increase the risk of SIDS, strangulation, suffocation, or entrapment/wedging. Infants should ideally sleep in the same room as their parents but on a separate surface designed for infants for at least the first six months.⁴

Oklahoma PRAMS 2018-2022 data (excluding 2020 data due to a low response rate) were analyzed to examine possible related factors for increased rates of SIDS and SUID among NH AI/AN infants. Our study showed that the use of blankets, mattresses, bumper pads, couches, and toys were more prevalent among NH AI/AN infants than NH White infants (Figure 1). The use of a crib or pack and play, sleep sack, and infant car seat was less among NH AI/AN infants than NH White infants (Figure 1).

Figure 2 shows differences in sleep position between NH AI/AN and NH White infants. 80.5% of NH AI/AN and 84.8% of NH White infants were placed on their backs to sleep. The prevalence for being placed on their stomach was similar among NH AI/AN and NH White infants (Figure 2). NH AI/AN infants also had the second lowest rate of sleeping alone (50.8%; Figure 3) among other racial/ethnic groups.

This study suggests further research to consider the role of cultural practices and contextual behaviors not captured in PRAMS. One of the limitations of this study is that PRAMS is a self-reported survey which potentially includes biases such as social desirability.

Figure 1. Sleep environment comparisons between non-Hispanic AI/AN and non-Hispanic White infants

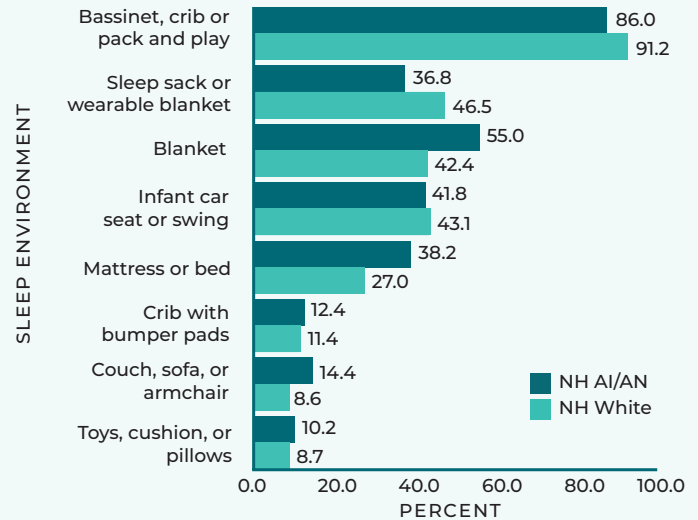


Figure 2. Sleep position comparisons between non-Hispanic AI/AN and non-Hispanic White infants

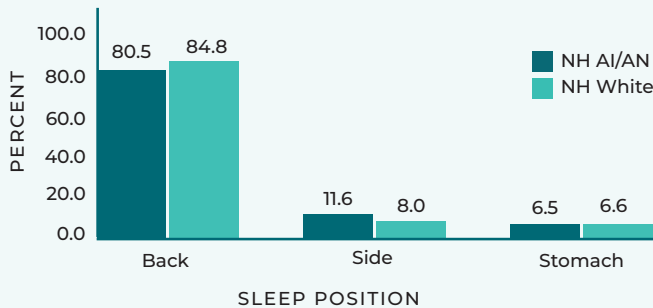
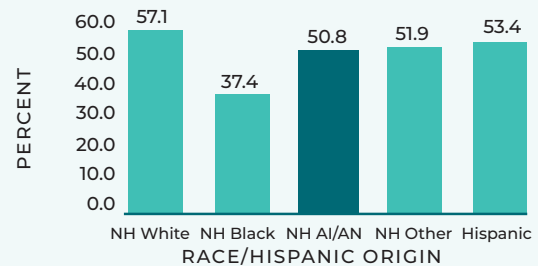


Figure 3. Infant slept alone by race/Hispanic origin



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