

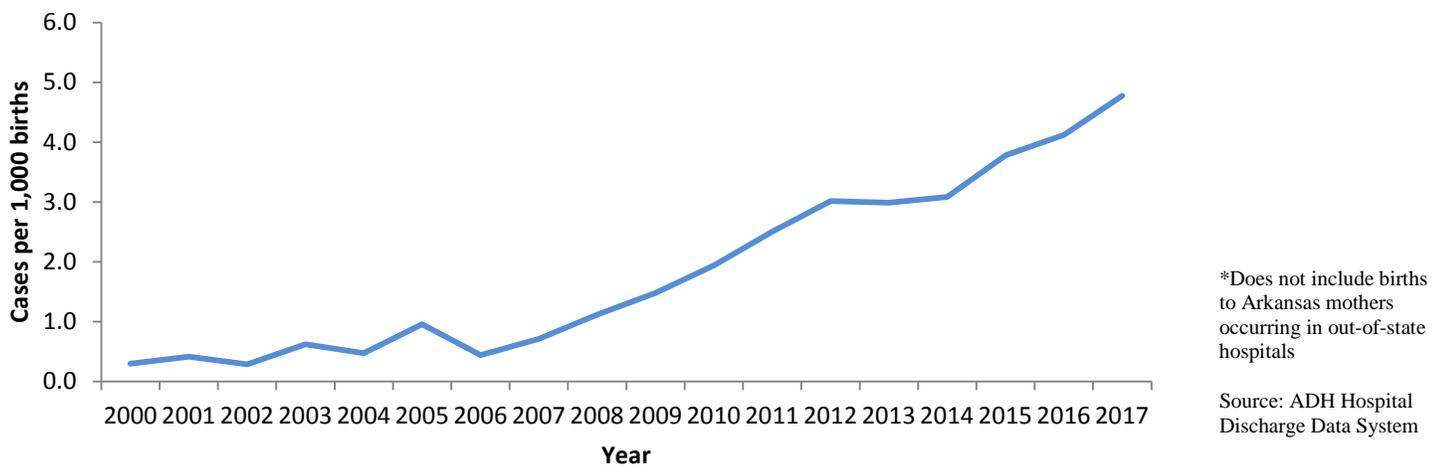


Neonatal Abstinence Syndrome in Arkansas 2000 – 2017

Cases of Neonatal Abstinence Syndrome Continue to Rise

Neonatal abstinence syndrome (NAS) is a constellation of symptoms resulting from drug use during pregnancy. The rate of NAS diagnosis in Arkansas increased nearly fifteen fold between 2000 and 2017 (Figure 1). In 2000, the NAS rate was 0.3 per 1,000 births. By 2017, it increased to 4.8 per 1,000 births. The median number of days spent in the hospital for babies diagnosed with NAS was 10, compared to 2 days for babies without NAS in 2017. That same year, median medical care costs for babies diagnosed with NAS were \$28,270 compared to \$4,446 for babies born without NAS. Iatrogenic NAS cases, or instances with prolonged neonatal intensive care and extended use of opioids resulting in withdrawal in newborns, were excluded from analyses.

Figure 1. Rate of neonatal abstinence syndrome per 1,000 hospital births, Arkansas residents, 2000-2017*



Neonatal Abstinence Syndrome is More Common in Certain Groups of People

The rate of NAS diagnosis was more prevalent among whites than it was among non-whites in Arkansas during 2017. About five out of every 1,000 white babies were diagnosed with NAS in 2017, compared to about three out of every 1,000 among non-whites. Similarly, non-Hispanics had higher rates than Hispanics. NAS rates also varied based on insurance type. The rate of NAS diagnosis was more than twice as high among women on Medicaid as women with other types of insurance (Table 1).

Table 1. Neonatal abstinence syndrome diagnoses: Demographic characteristics and insurance, Arkansas residents, 2017*

		Number	Percent**	Rate per 1,000
Race***	White	127	77.9%	5.3
	Non-white	36	22.1%	3.5
Ethnicity***	Hispanic	< 5	N/A	N/A
	Non-Hispanic	155	95.1%	5.1
Insurance	Medicaid	138	84.7%	6.3
	Private	11	6.7%	1.5
	Other or unknown	14	8.6%	2.7

*Totals vary due to missing values.

**Percentages may not add up to 100 due to missing values.

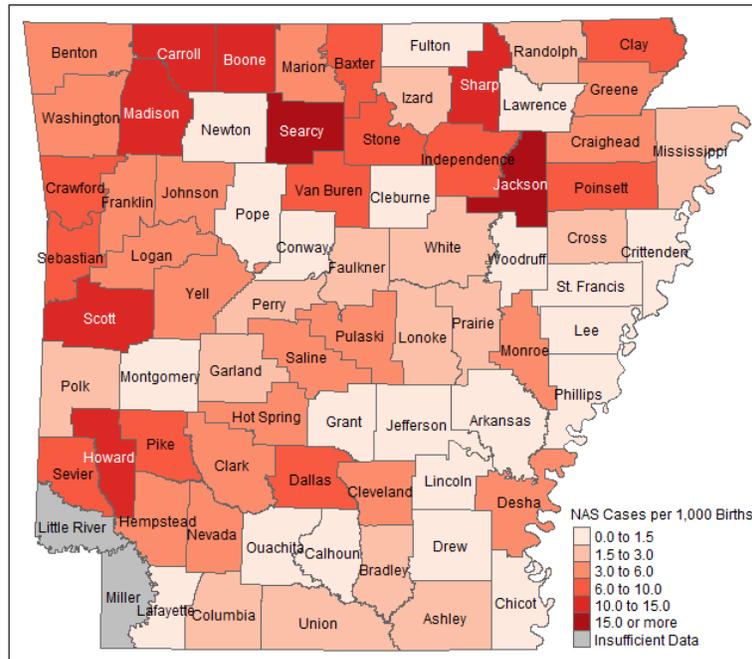
***Non-whites merged into a single category and counts < 5 redacted to ensure confidentiality.

Source: ADH Hospital Discharge Data System

NAS Rates Vary by County

The rate of NAS diagnosis varied across Arkansas counties. More than three quarters of counties reported at least one case of NAS between 2014 and 2017. Some of the highest rates were from Northwest and Northeast regions in Arkansas (Figure 2).

Figure 2. Neonatal abstinence syndrome diagnoses per 1,000 hospital births, Arkansas residents, 2014 - 2017*



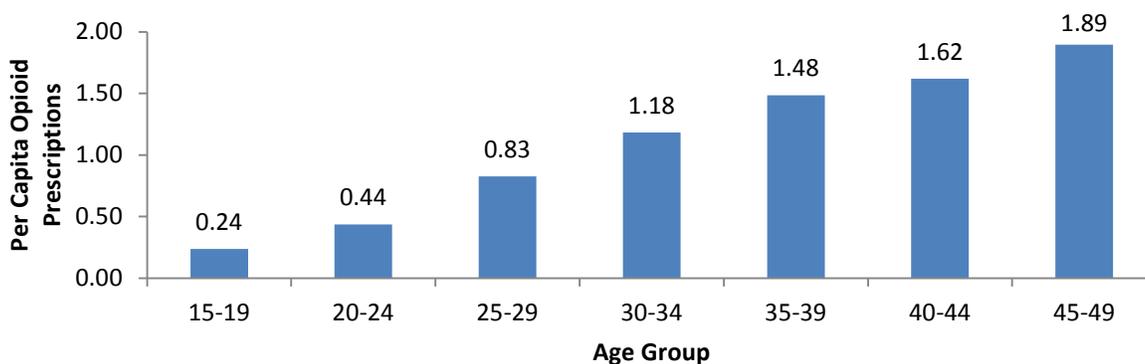
*Does not include births to Arkansas mothers occurring in out-of-state hospitals

Source: ADH Hospital Discharge Data System

Opioid Prescribing to Women of Reproductive Age

Prescription opioid use during pregnancy is a major risk factor for NAS. In Arkansas, women between the ages of 15 and 49 filled between 0.24 and 1.89 opioid prescriptions per capita in 2017 (Figure 3). However, opioid prescriptions among women of reproductive age have decreased since 2014, when the range was between 0.36 and 2.11.

Figure 3. Opioid prescriptions filled per capita by women of reproductive age, Arkansas, 2017



Source: Arkansas Prescription Drug Monitoring Program

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