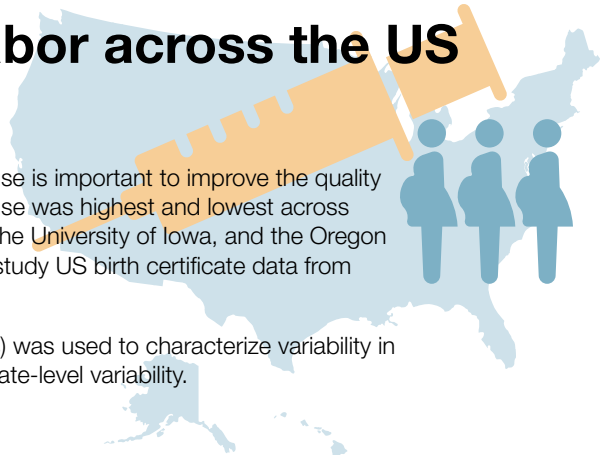


# Neuraxial analgesia use in labor across the US

## Where is the epidural most prevalent?

Understanding geographic variability of neuraxial analgesia (epidural) use is important to improve the quality of obstetric anesthesia care. To determine where neuraxial analgesia use was highest and lowest across US states, investigators from Stanford University School of Medicine, the University of Iowa, and the Oregon Health & Science University-Portland State University collaborated to study US birth certificate data from 2015 in a retrospective, population-based, cross-sectional analysis.<sup>a</sup>

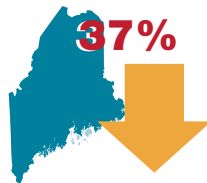
Multilevel modeling (accounting for patient-level and state-level factors) was used to characterize variability in neuraxial analgesia use and to assess those factors' contribution to state-level variability.



**1,920,369**



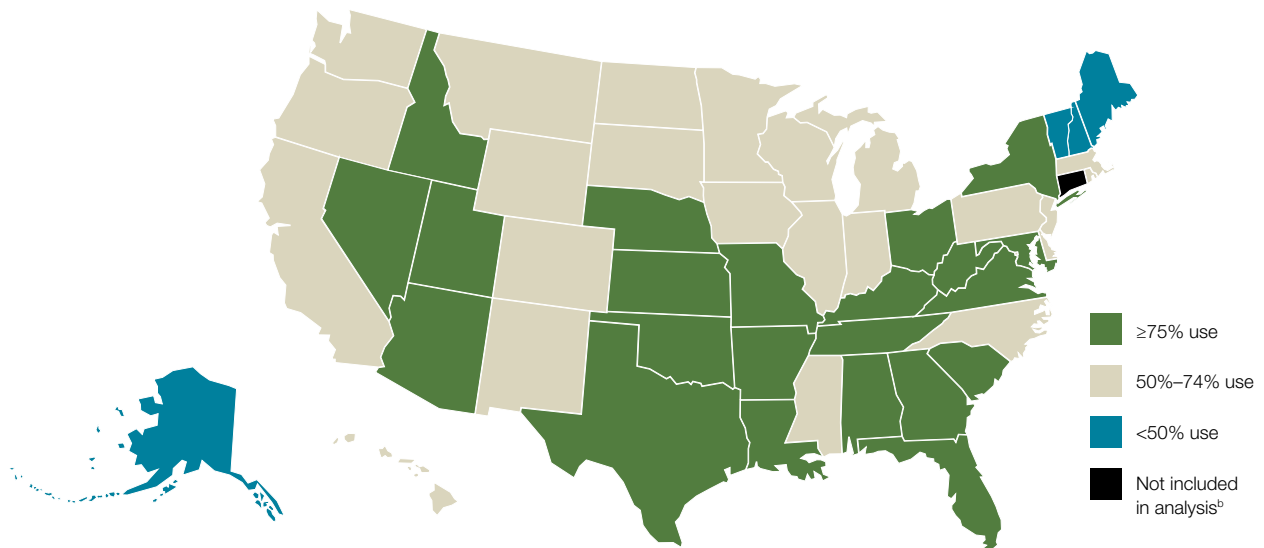
**Women who received neuraxial labor analgesia in 2015:**  
1,920,369 (73.1%)



**Variations by state: Adjusted prevalence of neuraxial analgesia use<sup>b</sup>**  
Lowest: Maine, 37%



Highest: Nevada, 80%



22 states had **≥75%** use of neuraxial analgesia

4 states had **<50%** use of neuraxial analgesia

## CONCLUSIONS

Substantial variation exists in the prevalence of neuraxial analgesia use across the United States, with a twofold difference in the highest prevalence state (Nevada) versus the lowest prevalence state (Maine). Only 5.4% of the statewide variation, however, was attributable to the state after adjusting for patient-level factors. Other factors, such as hospital-level data and anesthesia workforce measures, may likely account for some variance between states.

Research to determine whether the prevalence variation influences outcomes for mothers and babies would be valuable, according to the study authors.

<sup>a</sup>Source: Butwick AJ, Bentley J, Wong CA, et al. United States state-level variation in the use of neuraxial analgesia during labor for pregnant women. *JAMA Network Open*. 2018;1(8):e186567.doi:10.1001/jamanetworkopen.2018.6567.

<sup>b</sup>Birth data for Connecticut was not examined because that state did not use the 2003 revised US Standard Certificate of Live Birth format.