

# Maternal Healthcare Disparities

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Department of Statistics and Data Science  
Carnegie Mellon University

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Rohan Devraj, Macey Kalmanek, Samantha Parras

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# Nurturing a pregnancy!



# Dataset

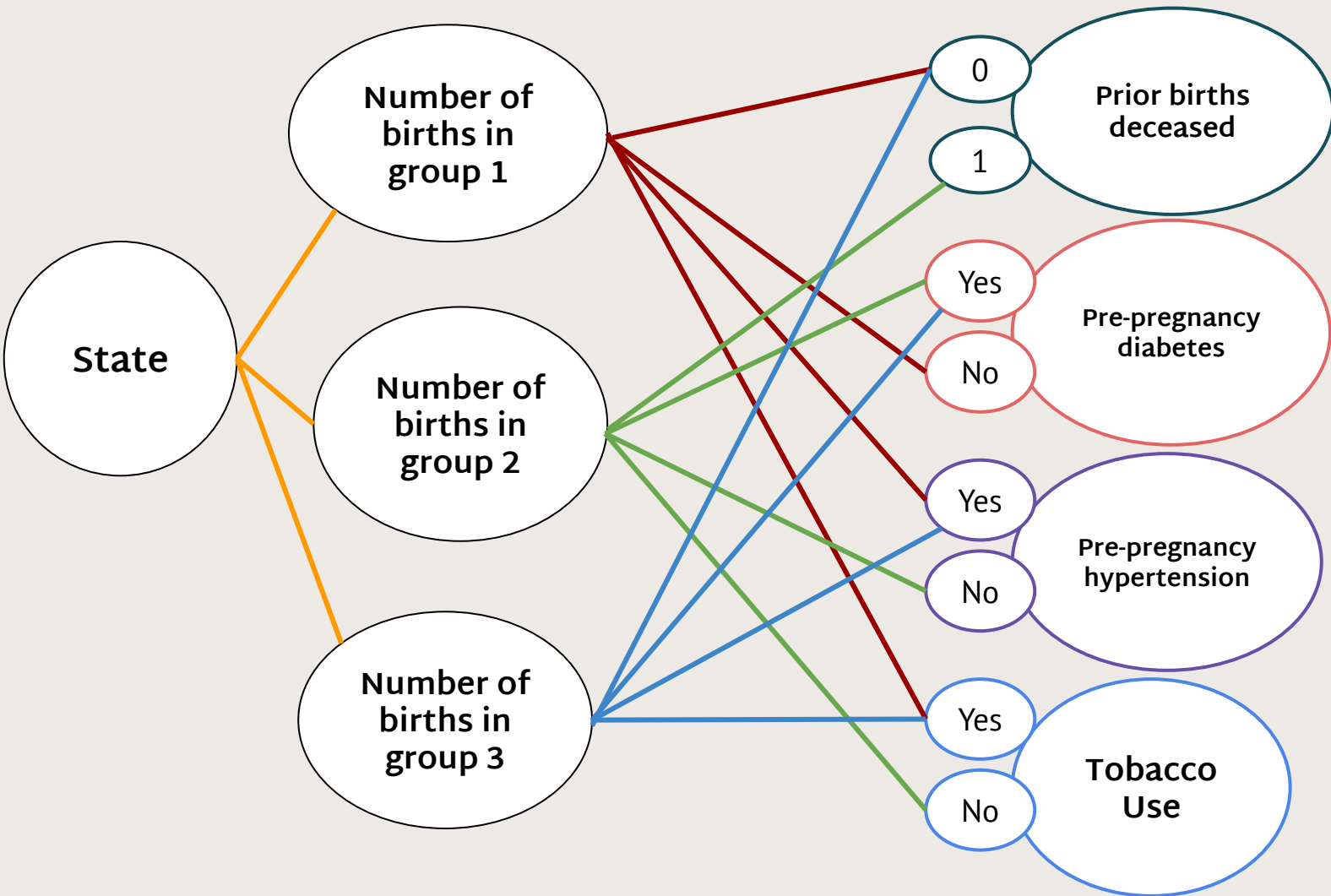
**CDC WONDER database for available birth records from 2019 aggregated by state and a few conditions**

- **State**
- **Pre-pregnancy health conditions**
  - Tobacco use
  - Pre-pregnancy diabetes
  - Pre-pregnancy hypertension
  - Prior births deceased
- **Number of births** (with a defined combination of pre-pregnancy health conditions)
- Average mother's age
- Birth weight
- Prenatal care metrics




**CDC WONDER**

Access the newest provisional  
mortality data

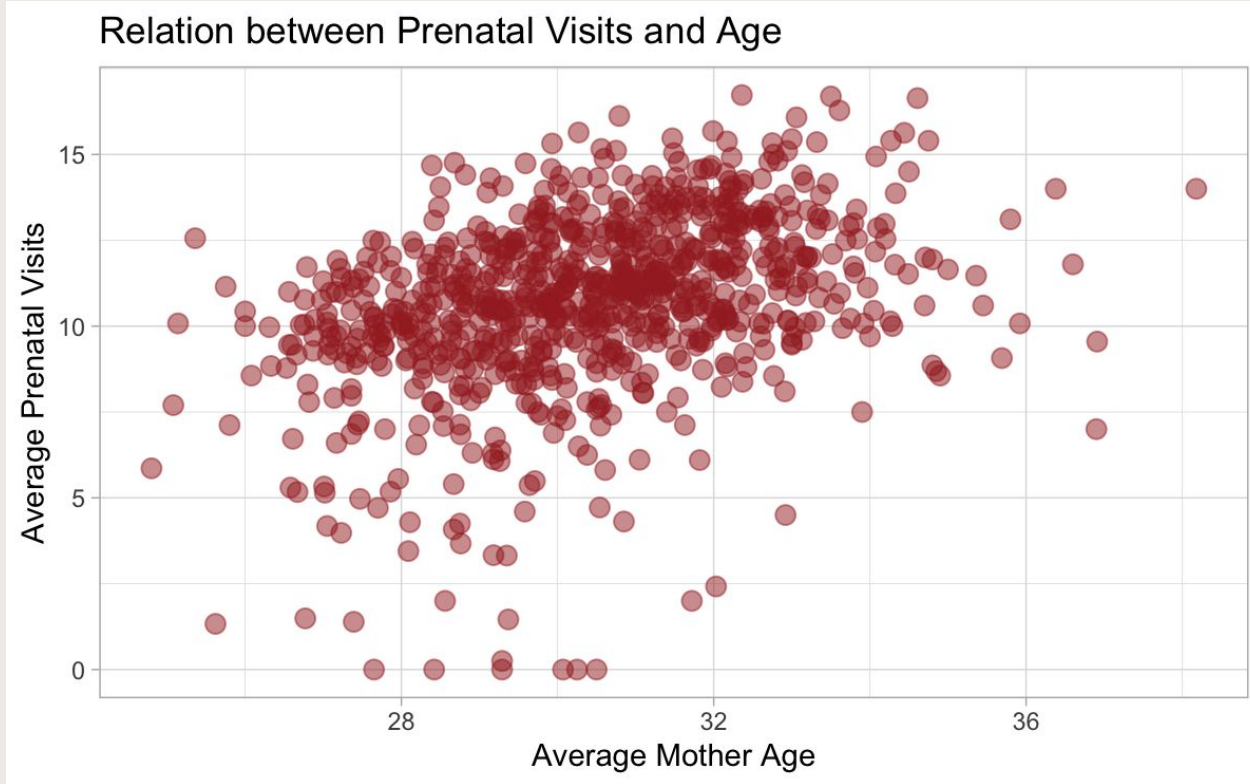


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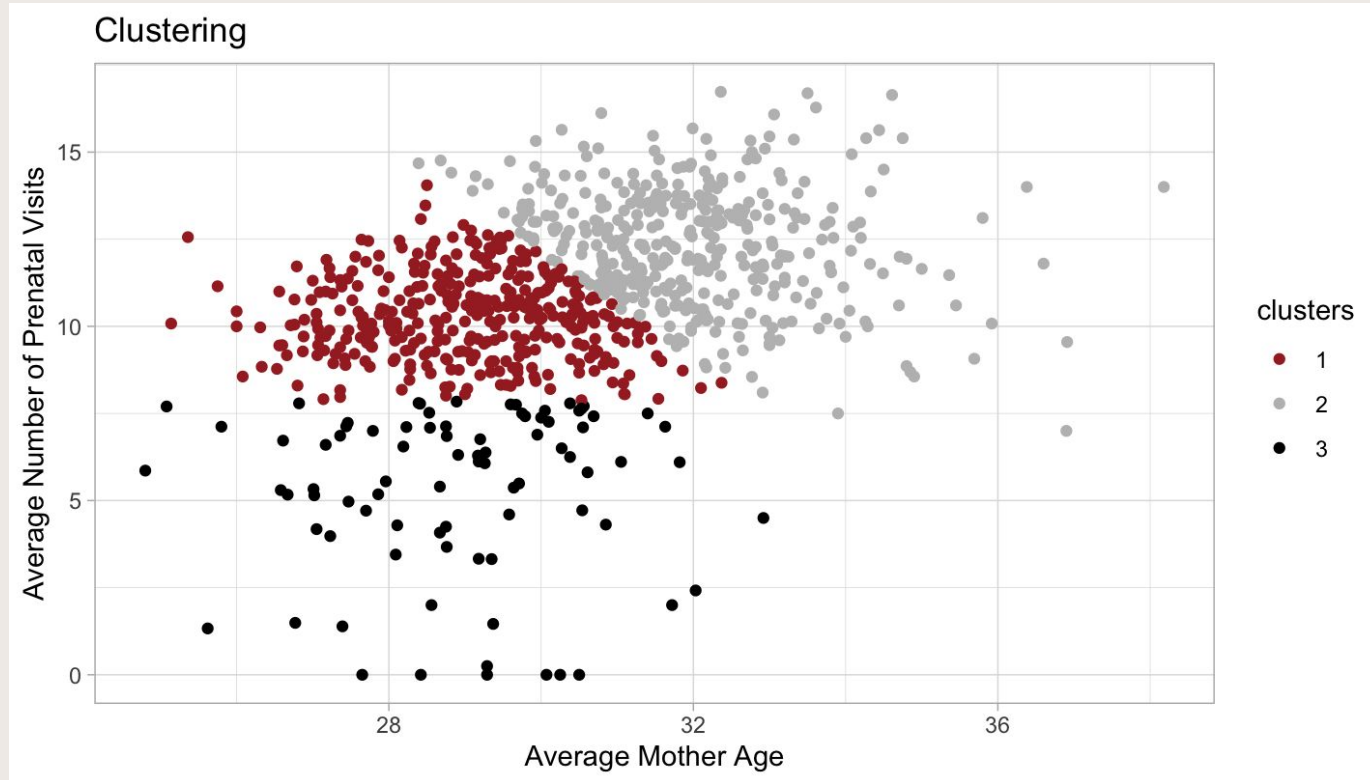
**Is there a relationship  
between mother age  
and prenatal visits?**



# There is weak yet positive correlation



Clusters reveals distinct groups based on average mother's age and average number of prenatal visits, highlighting variations in healthcare access.

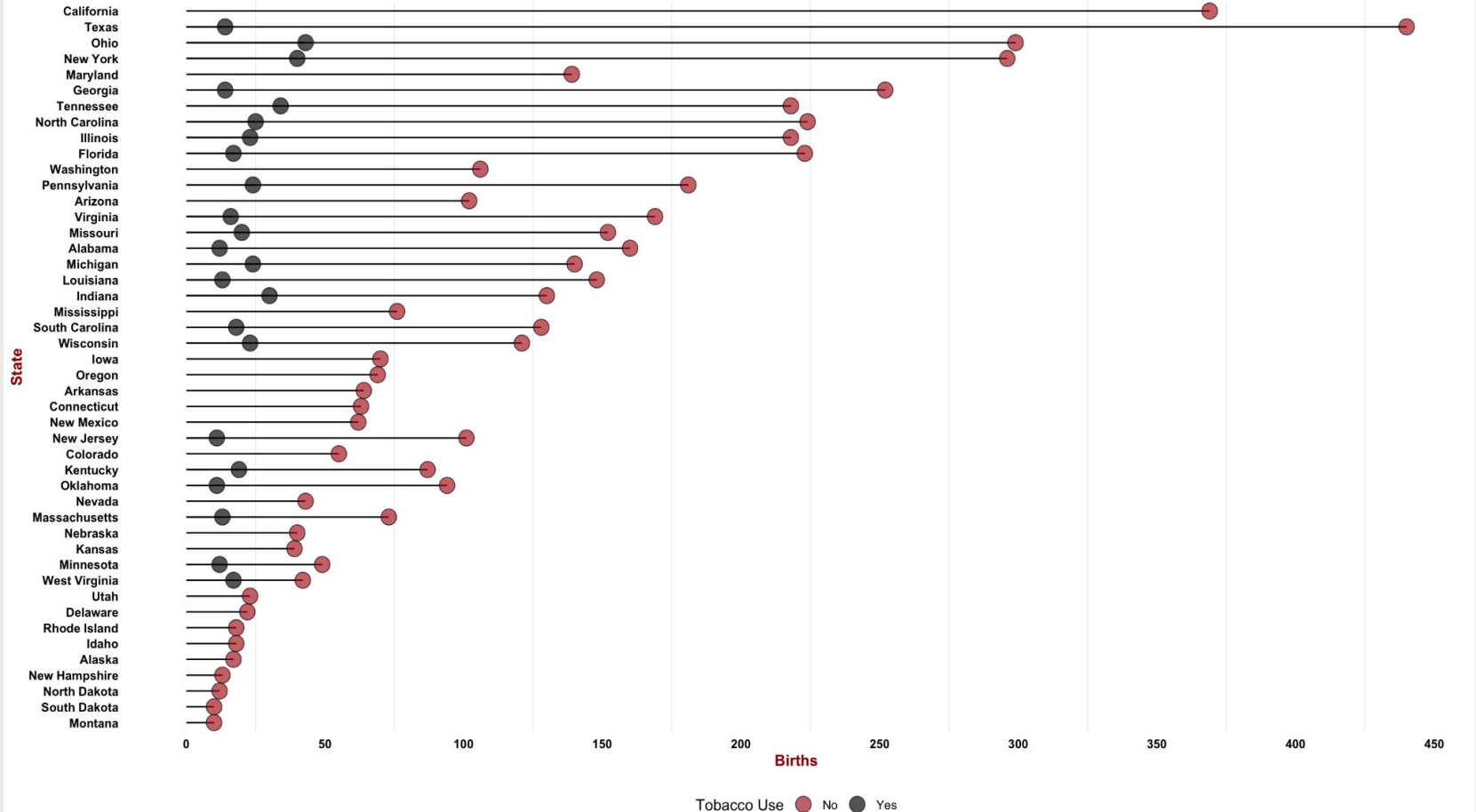


# Variables considered in number of births in each state

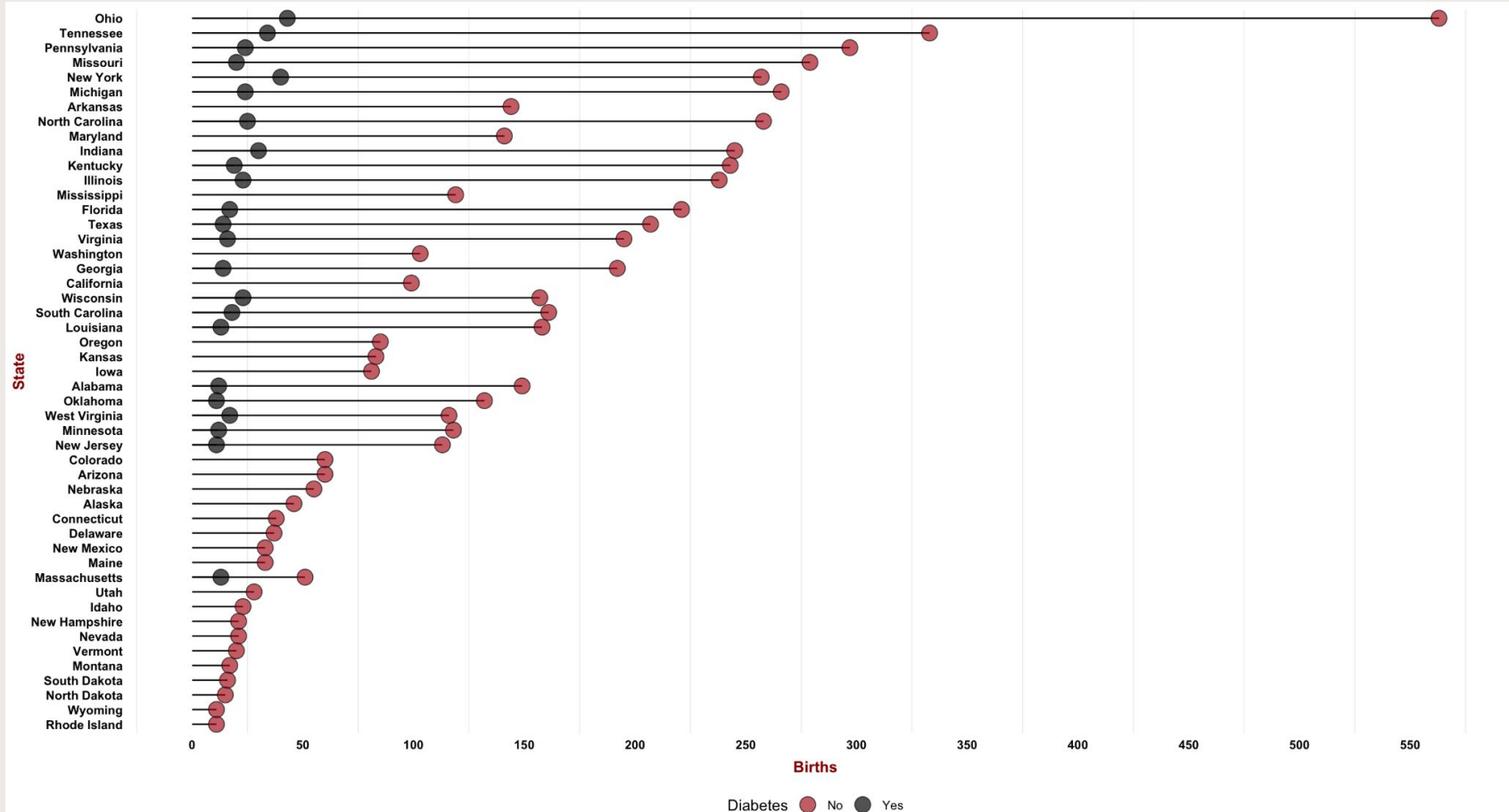
- Tobacco Use
- Pre-pregnancy diabetes
- Pre-pregnancy hypertension



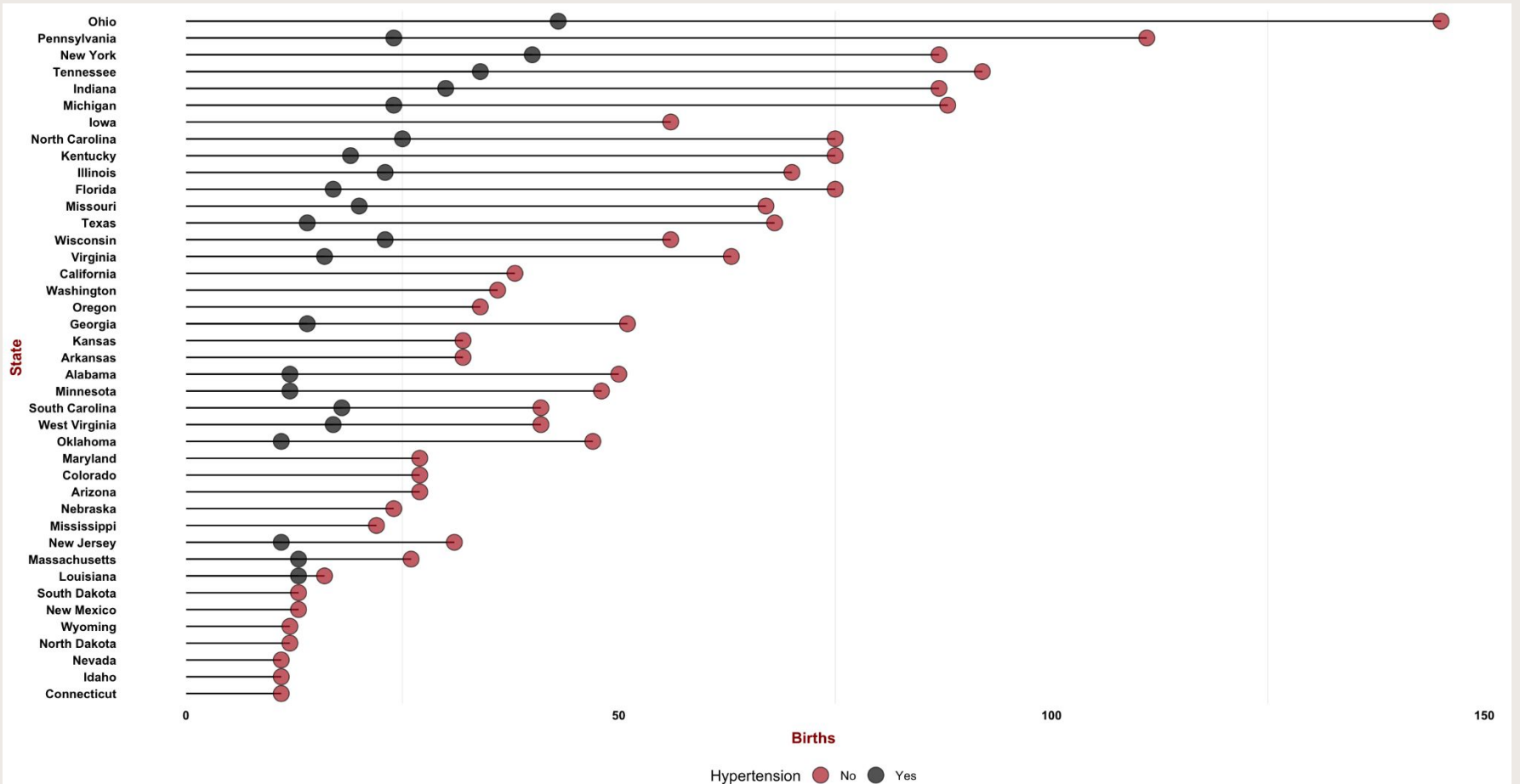
# In every state, tobacco use during pregnancy results in fewer births



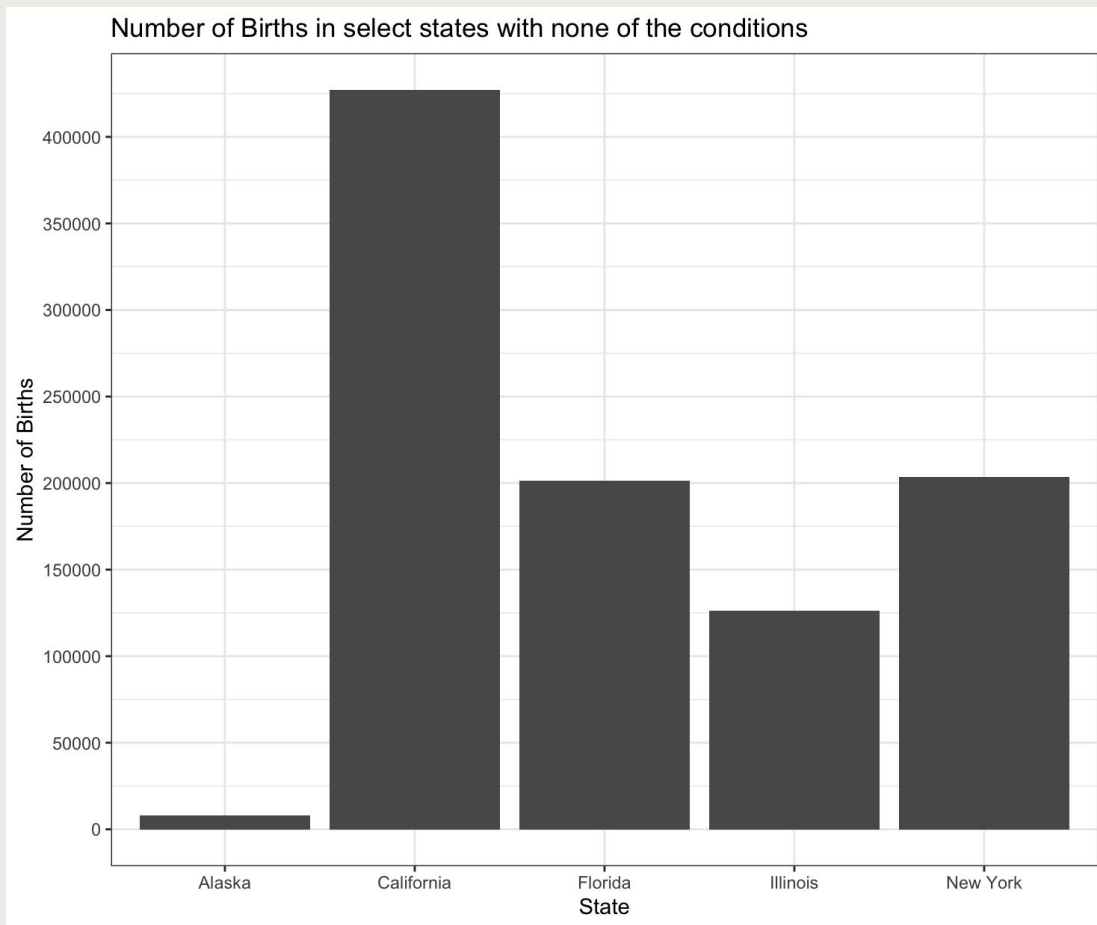
# In every state, diabetes during pregnancy results in fewer births



# In every state, hypertension during pregnancy results in fewer births



# The full picture

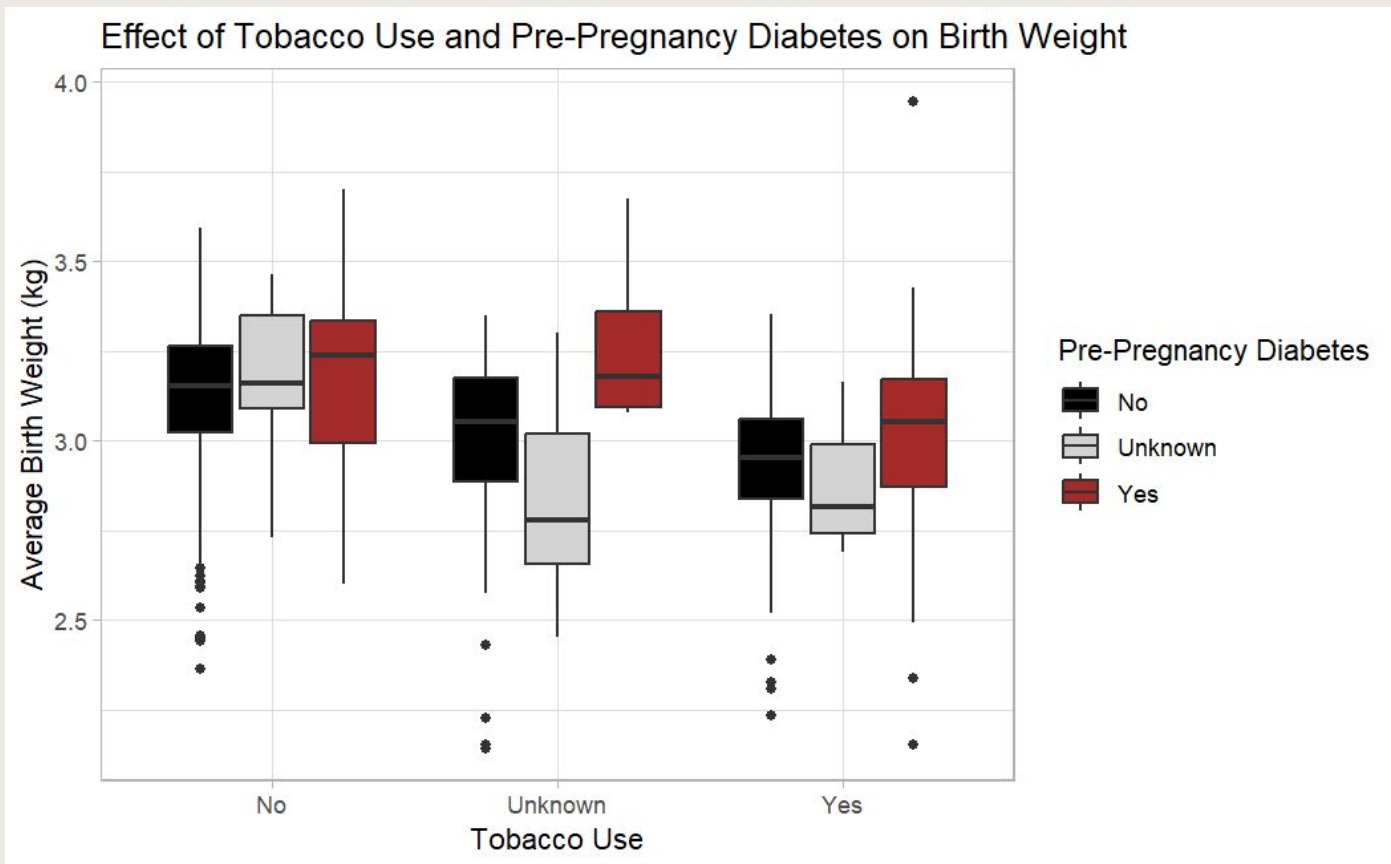


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**Is there an effect of tobacco use and pre-existing diabetes on the average birth weight of newborns?**



On average, we can visually infer that pre-pregnancy diabetes results in a higher average birth weight. Inversely, tobacco use shows a decrease in the weight of newborns.



# Recap & Limitations

- Unknown values
- Grouping of variables
- Socioeconomic status
- Contextual information
- Scope of analysis
- Temporal limitations