

Maternal Healthcare Disparities

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Nurturing a pregnancy!



Dataset

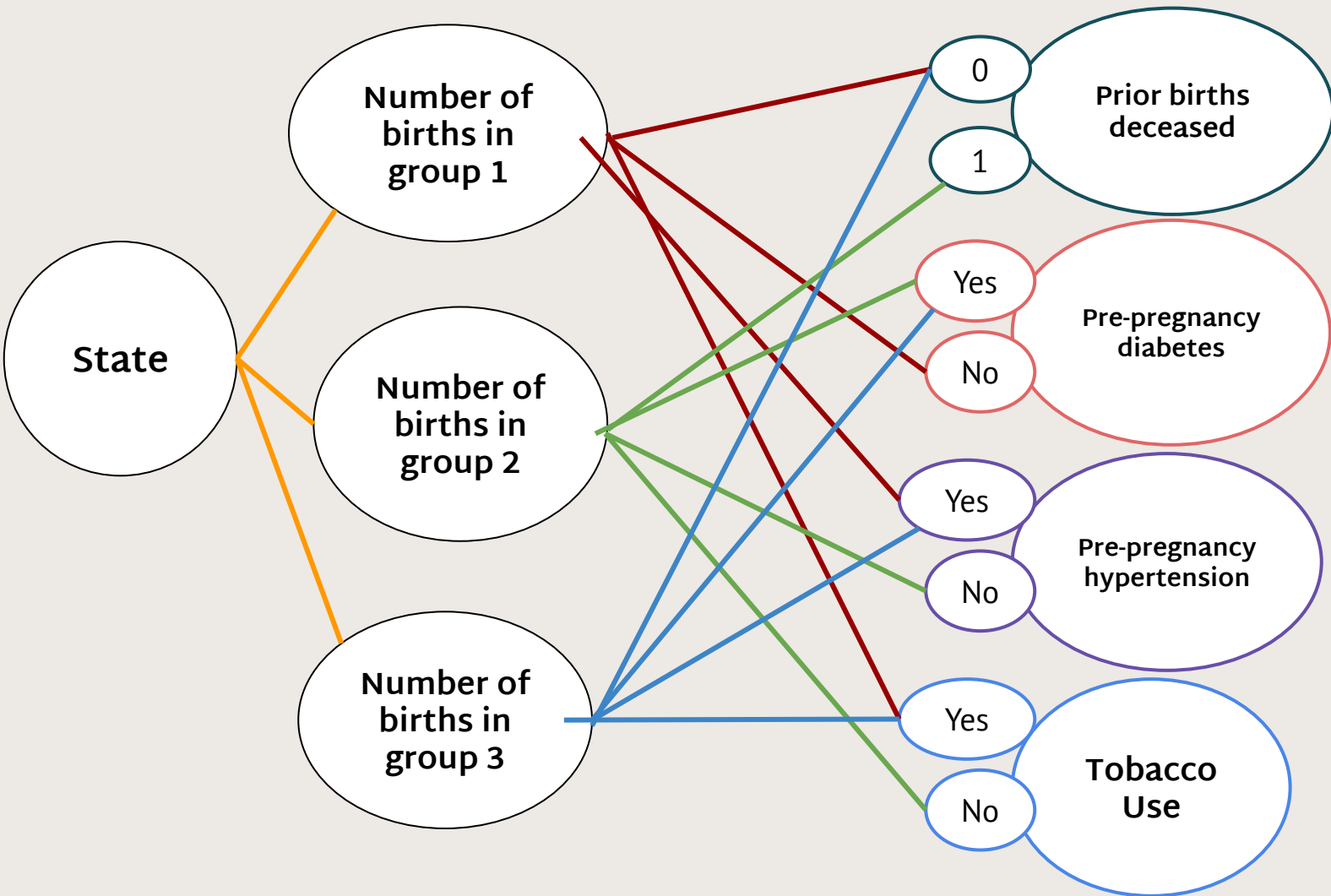
CDC WONDER database for available birth records from 2019 aggregated by state and a few conditions

- **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

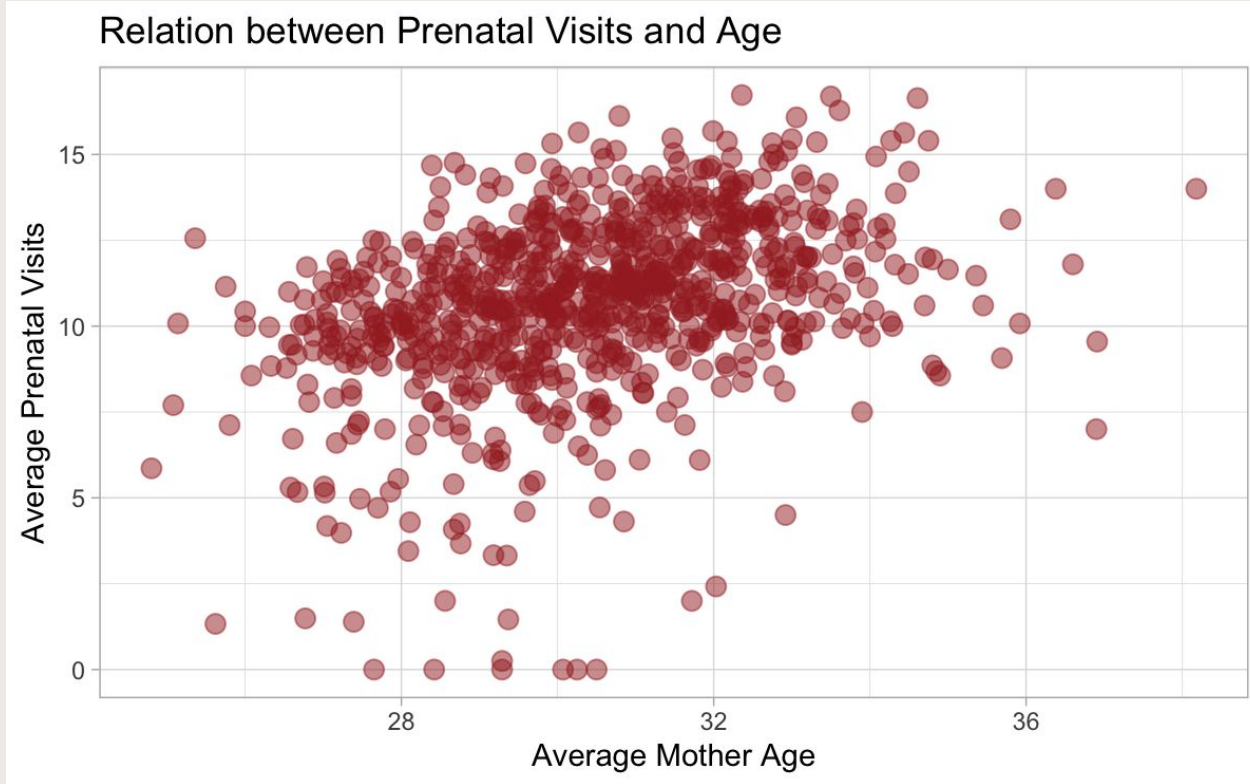
Access the newest provisional
mortality data



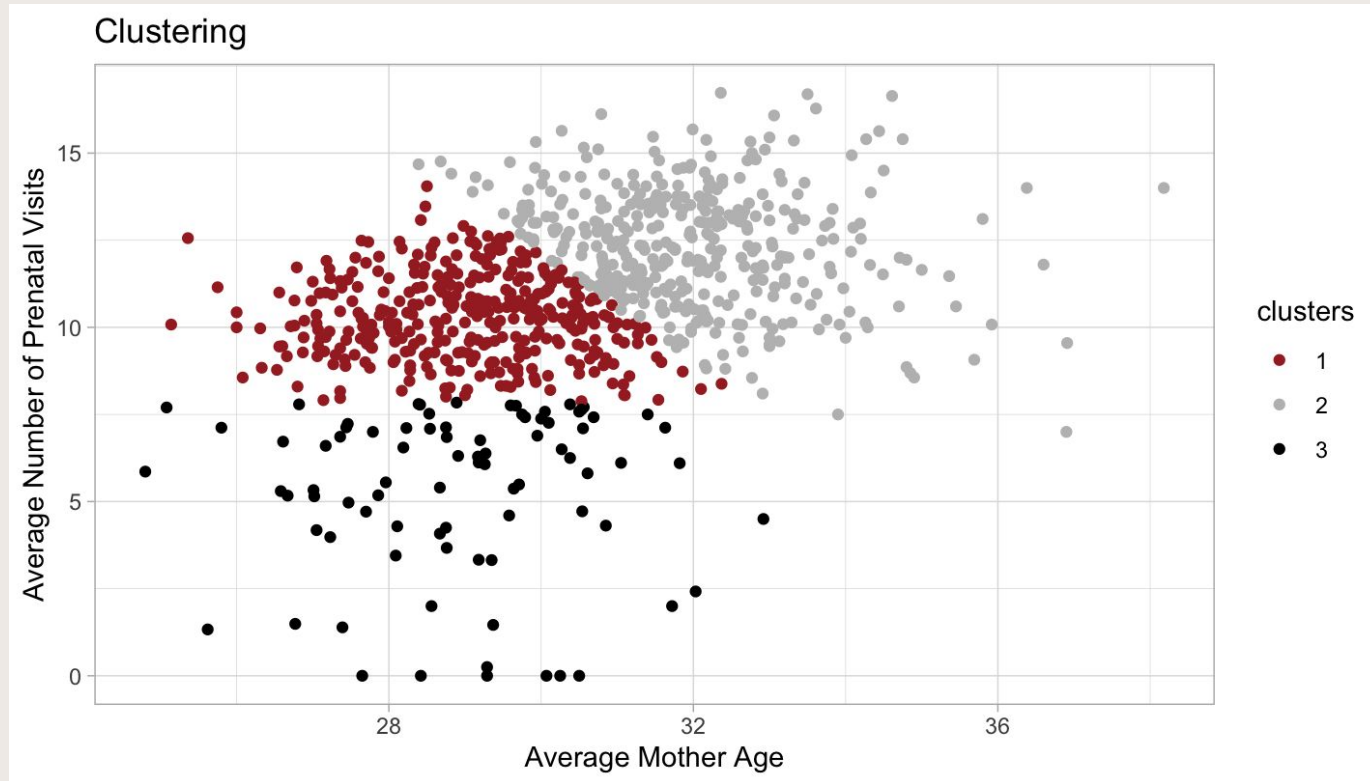
**Is there a relationship
between mother age
and prenatal visits?**



There is weak yet positive correlation



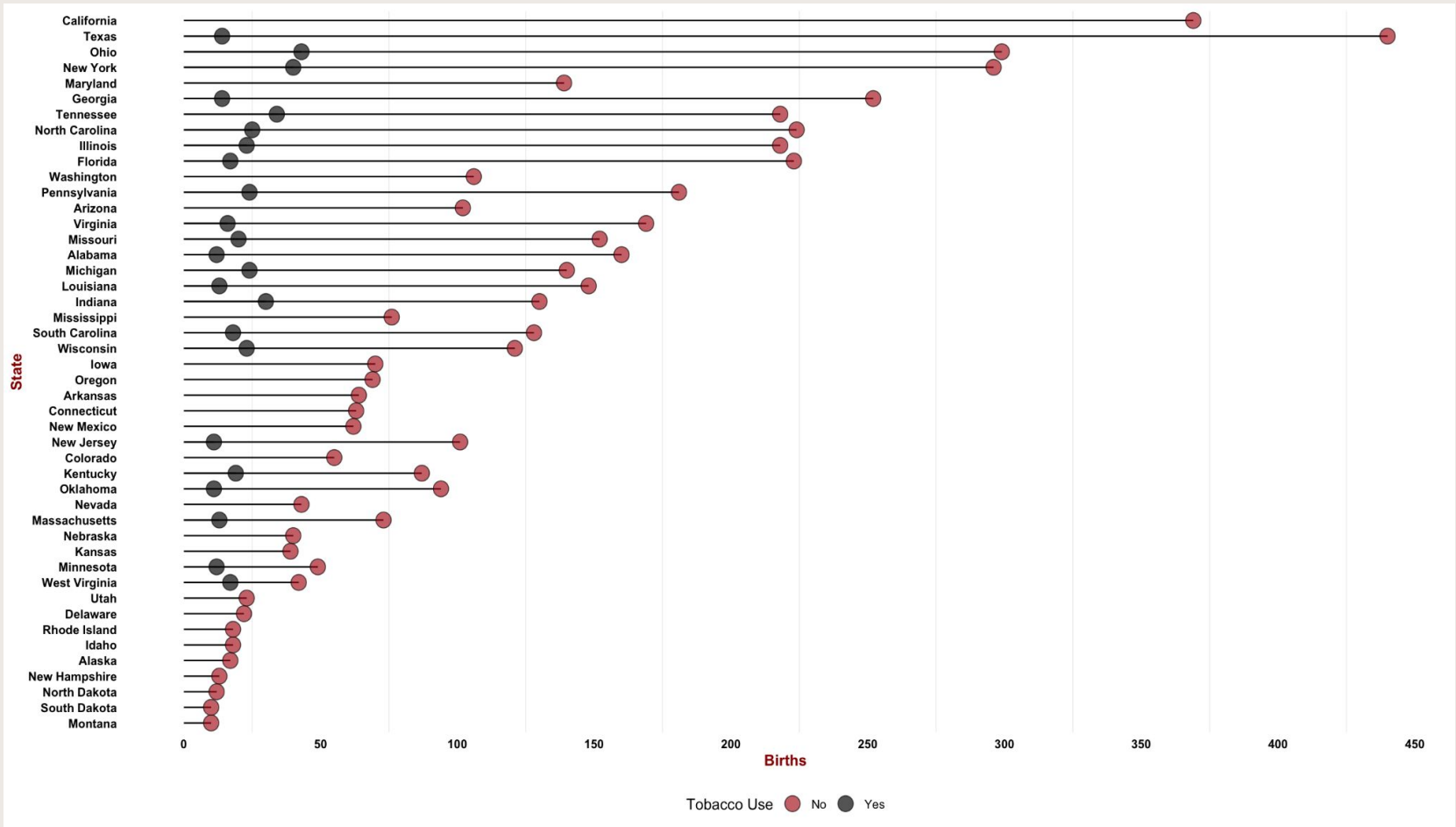
Clusters reveals distinct groups based on average mother's age and average number of prenatal visits, highlighting variations in healthcare access.



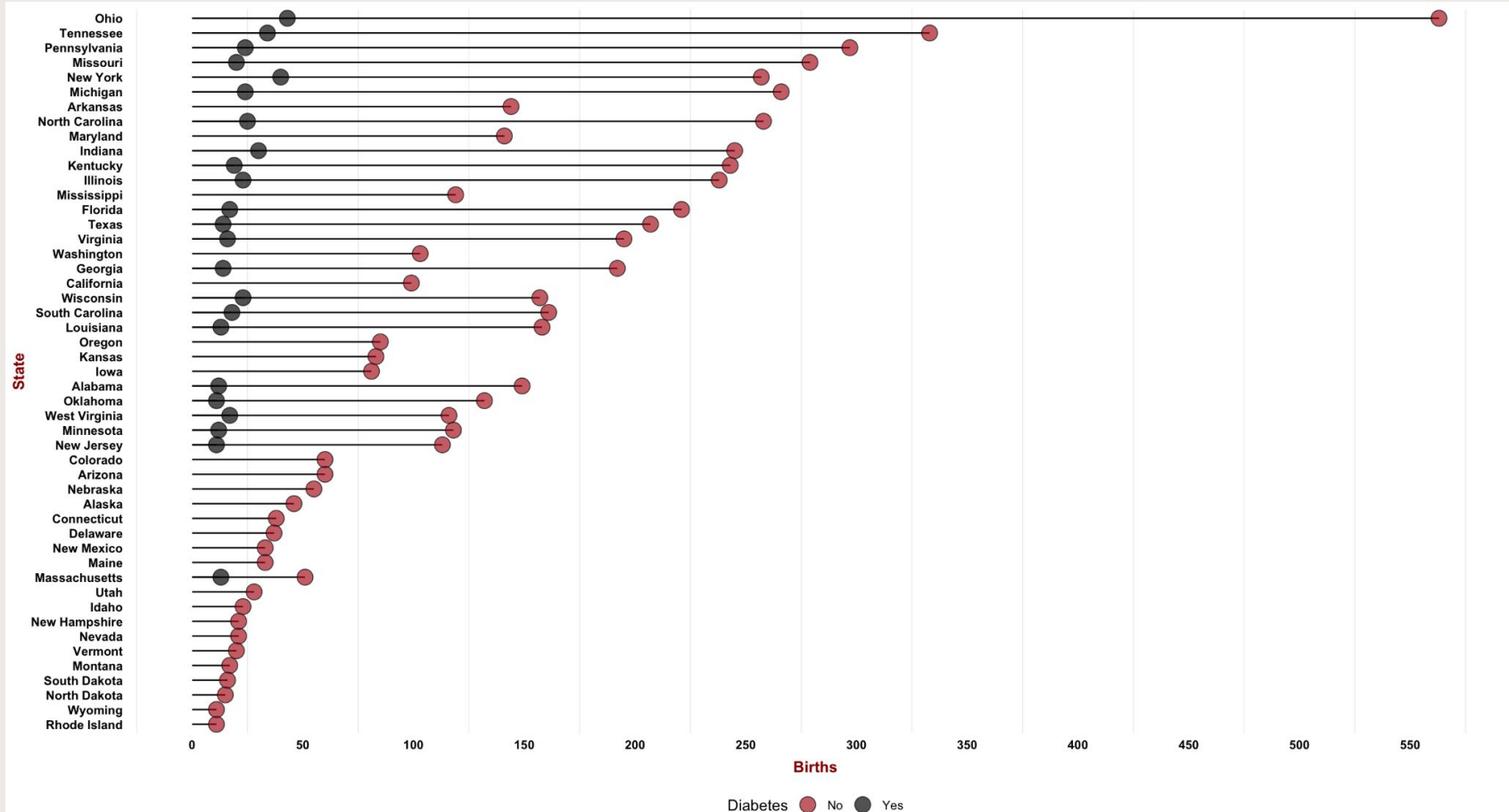
Variables considered in number of births in each state

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

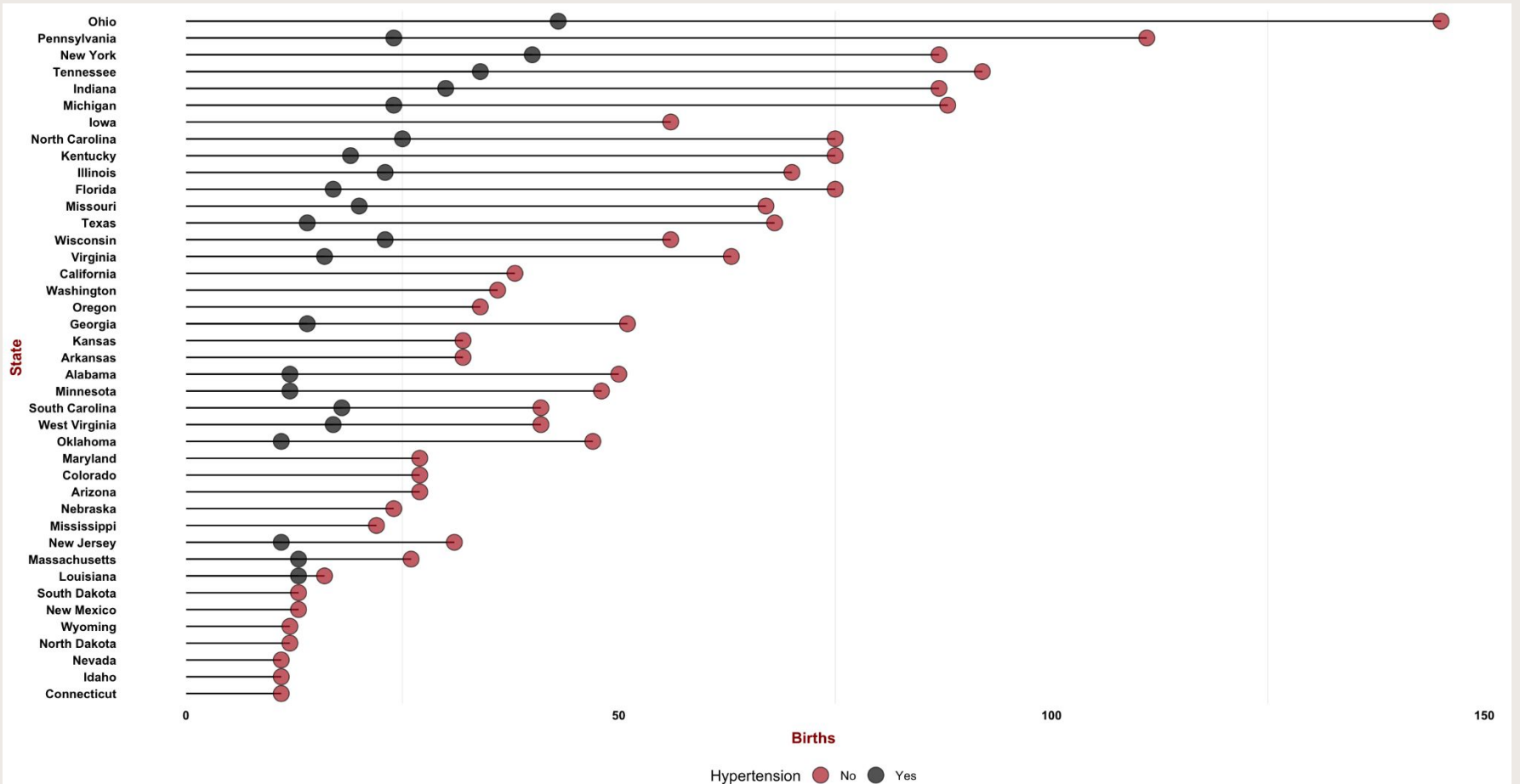
In every state, tobacco use during pregnancy results in fewer births



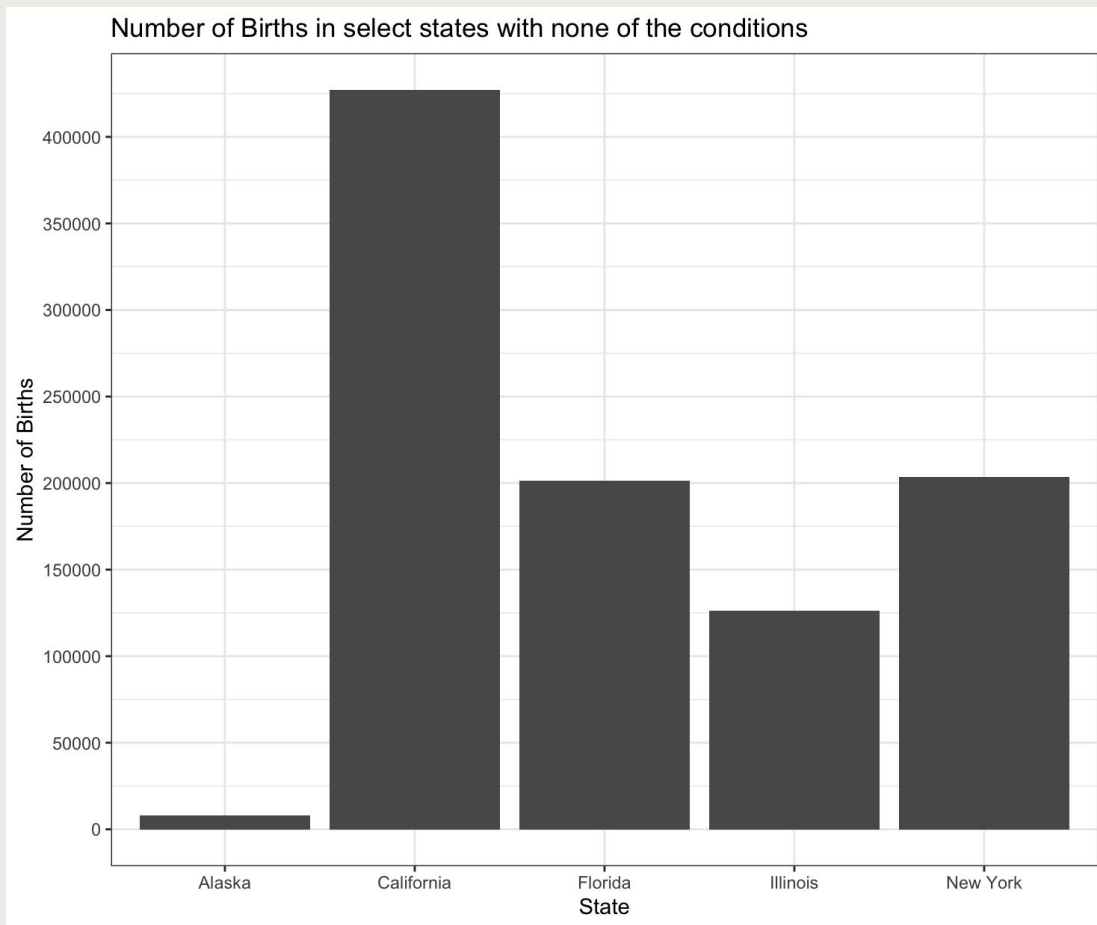
In every state, diabetes during pregnancy results in fewer births



In every state, hypertension during pregnancy results in fewer births



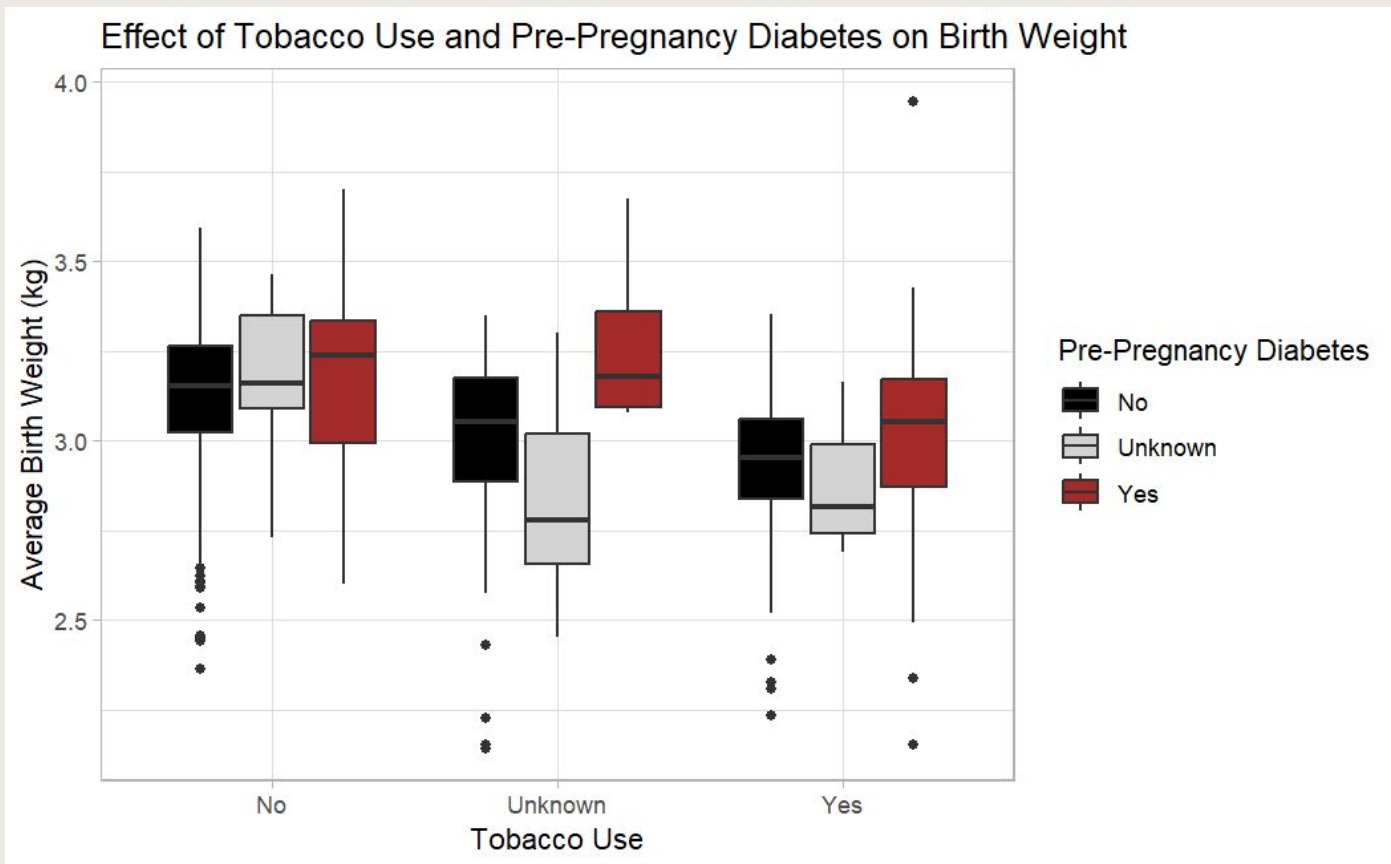
The full picture



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