Were reproductive rights spatially associated with birth rate at the state level in the U.S. in 2014?

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Reproductive rights are defined as the **rights of an individual** to decide whether to reproduce and maintain their **reproductive health** including choosing whether or not to **terminate a pregnancy** or use **contraception**.

Variables analyzed by state:

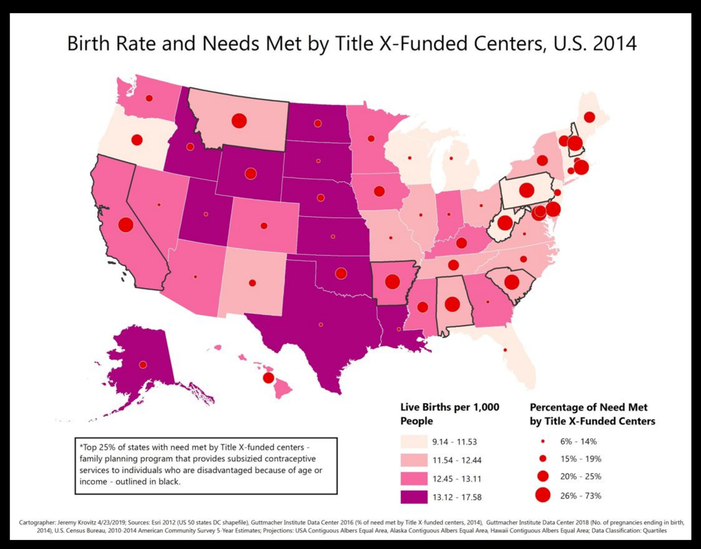
- ❑ Births per 1,000 women (Guttmacher Institute)
- ❑ Population per State (ACS 5-Year Estimates)
- ❑ Percent Need Met by Title X-Funded Centers (Guttmacher Institute)
- ❑ Infant Deaths per 1,000 People (Center for Disease Control)
- ❑ Abortions per 1,000 Women (Guttmacher Institute)
- ❑ Abortion Providers (Guttmacher Institute)
- ❑ Per Capita Income (ACS 5-Year Estimates)
- ❑ Health Insurance Coverage (ACS 5-Year Estimates)

Geoprocessing Tools

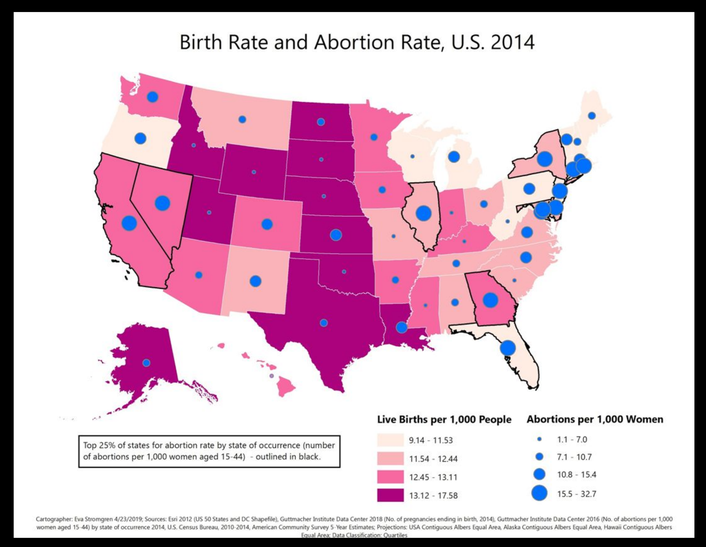
Join	Select by Attribute	Intersect
Each of the variables used in the map series were joined to the United States shapefile (Esri 2012).	Select by attribute was used to find the quartile of states doing the best for each reproductive factor in each of the supporting maps. The selected attributes were then exported as a shapefile and featured in the index map.	The STD rate was calculated to be figured in as one of the reproductive rights by selecting out the 25% of states with the lowest STD rates from each of the three disease layers and intersecting them.

Results

In total, eight maps were made, but only a few had noticeable spatial associations with the birth rate. Those factors which did demonstrate a correlation are featured here:

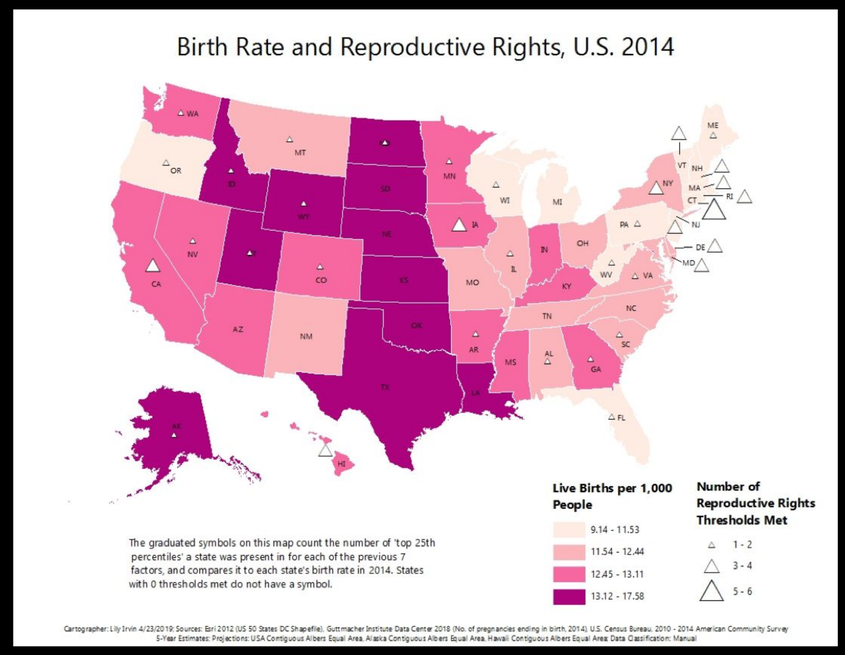


The percent need met by Title X-funded centers had some correlation with birth rate: the greater percentage of need met correlated with lower birth rates.



The abortion rate ranged from 1.1 to 32.7 per 1,000 women across the United States in 2014. In general, states with lower birth rates correlated with a higher abortion rate.

We created an index map from all of our factors, highlighting the top 25% of states best suited for that reproductive rights factor. In summing up the number of categories a state was in the top quartile, we created a map demonstrating states with the greatest number of reproductive rights factors.



Conclusion

There was a limited spatial correlation between reproductive rights and birth rates. The New England region clearly had a higher measure of reproductive rights and lower birth rates, which do demonstrate the correlation. The South had consistently fewer reproductive rights yet had moderate birth rates. The highest birth rates were in the central and western parts of the United States. Therefore, our research question warrants further investigation at different scales and using more factors.

Sources: American Community Survey 5-Year Estimates, Centers for Disease Control and Prevention, ESRI, Guttmacher Institute