

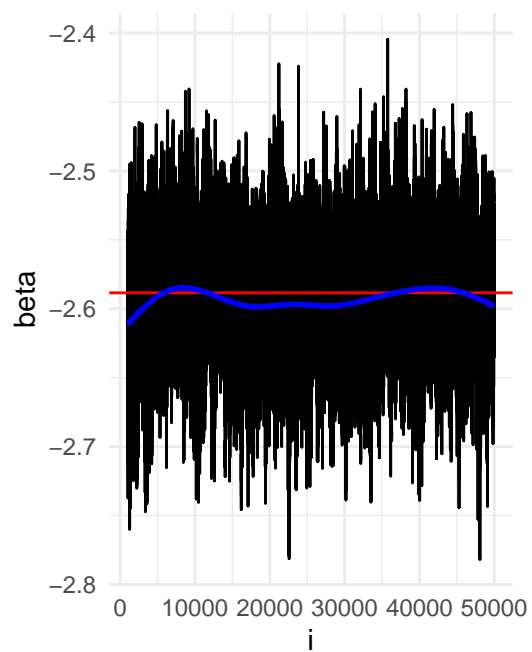
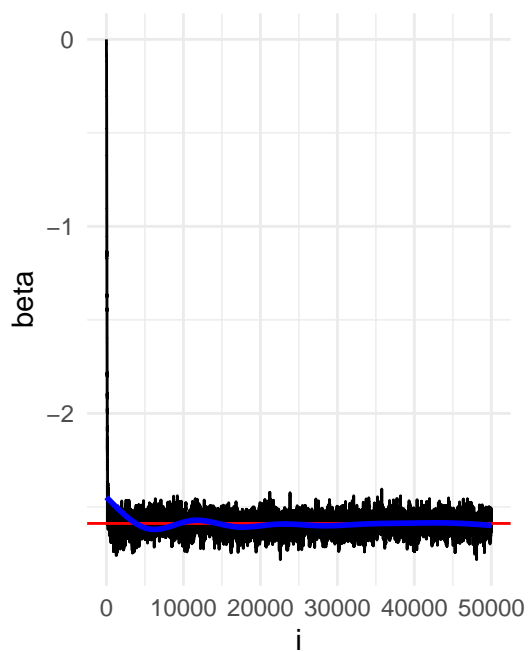
# Denis Ostroushko - PUBH 7440 - HW4 - Part 2

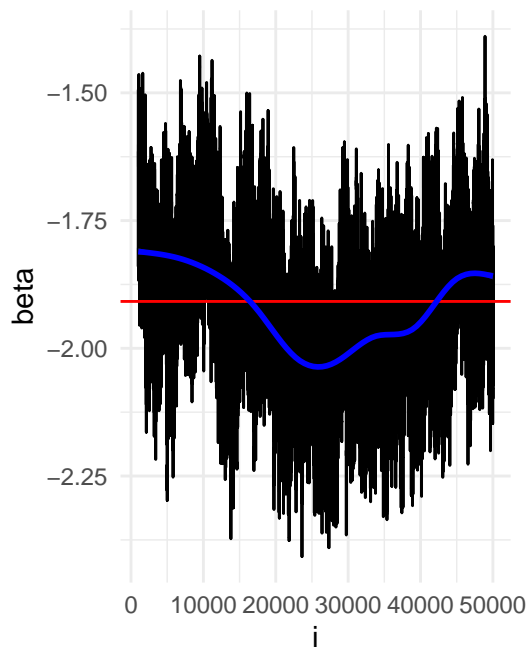
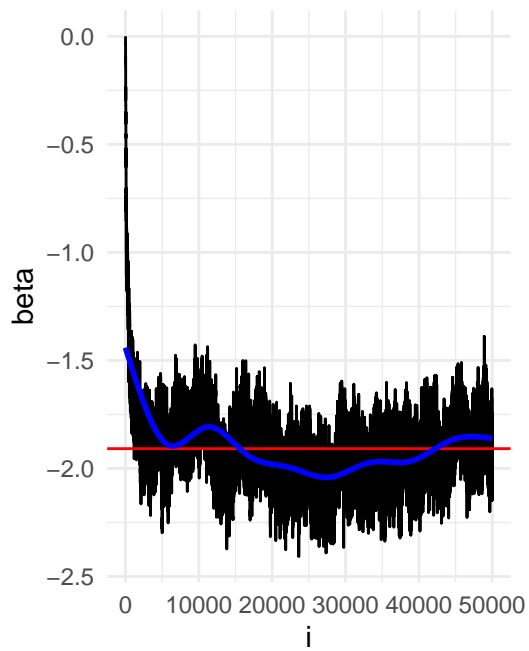
Problem 1

Problem 2

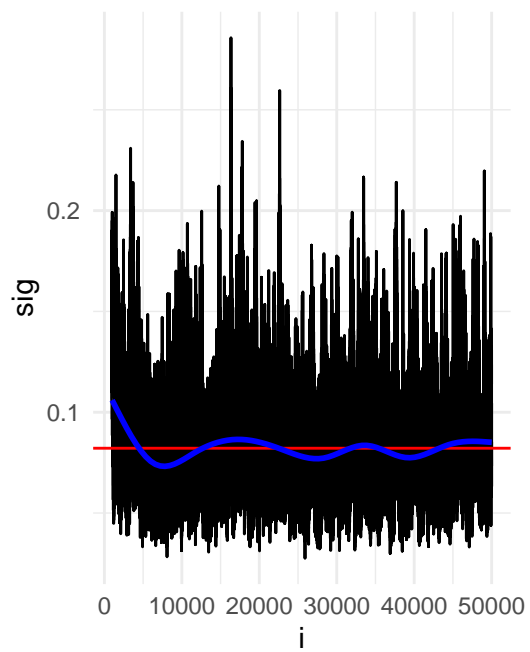
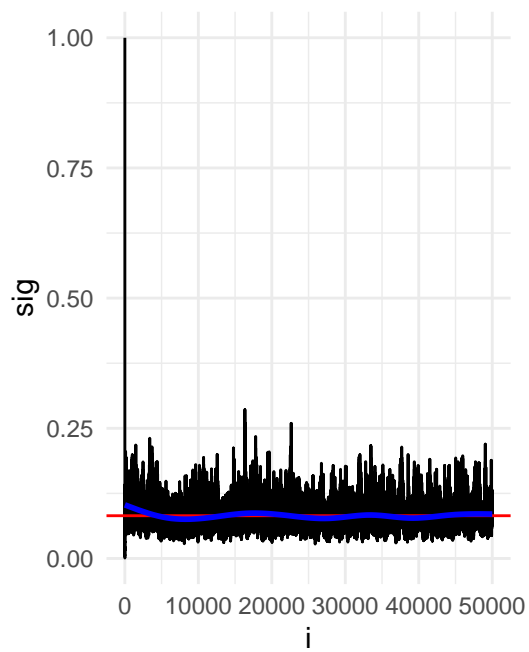
Problem 3

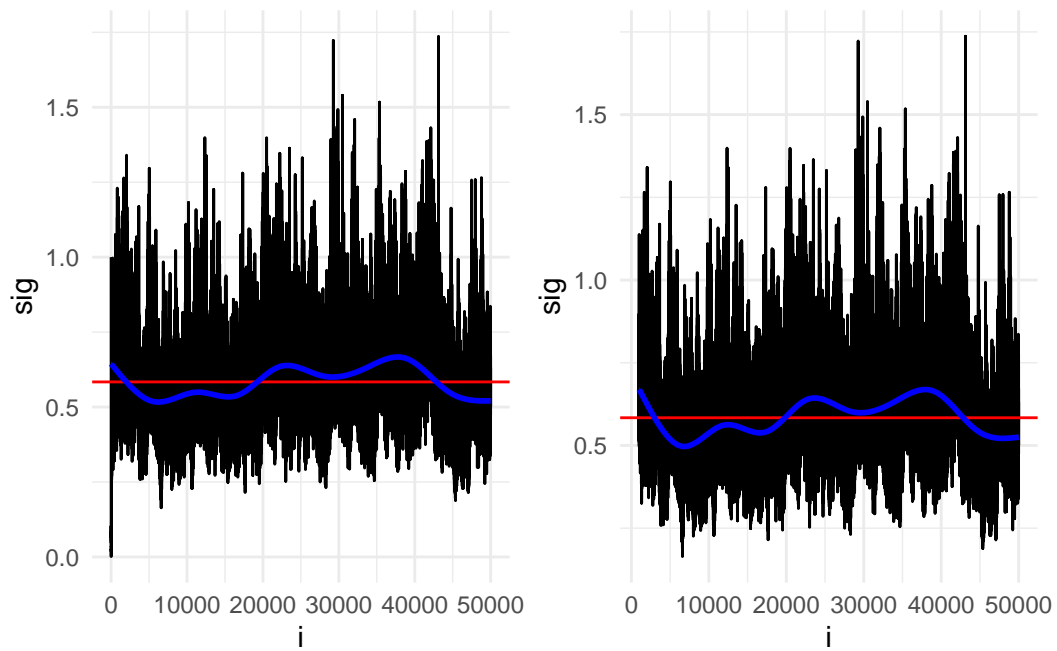
Betas





### Sigmas

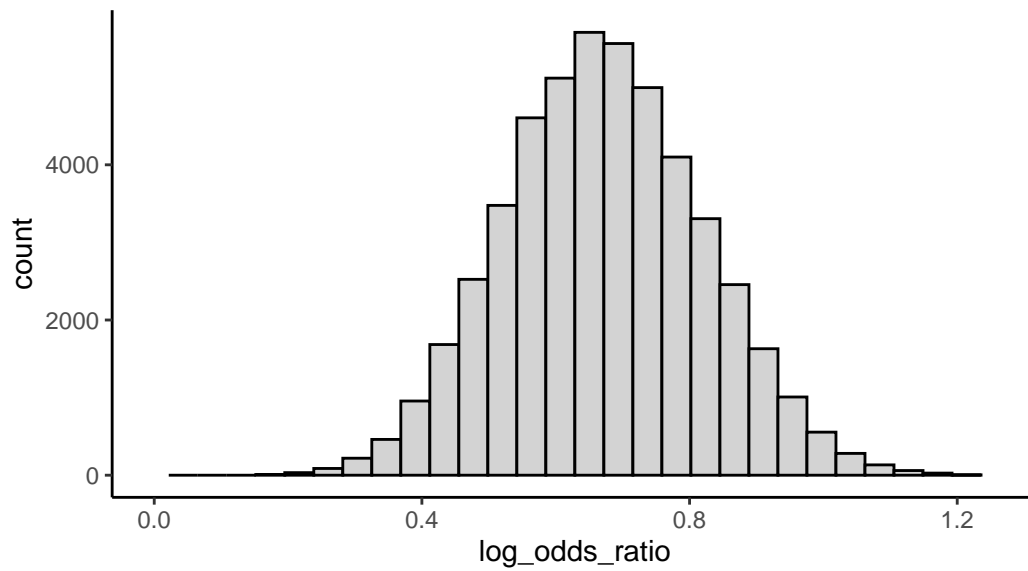




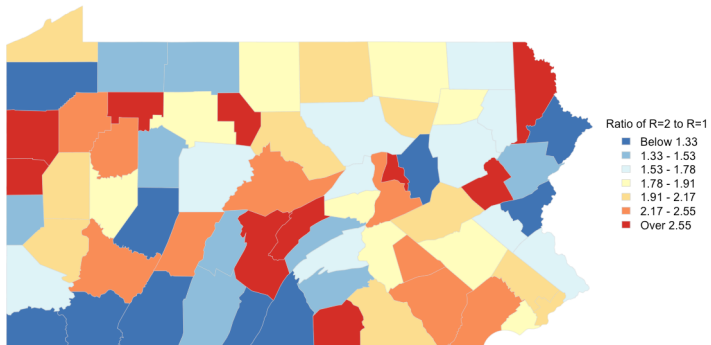
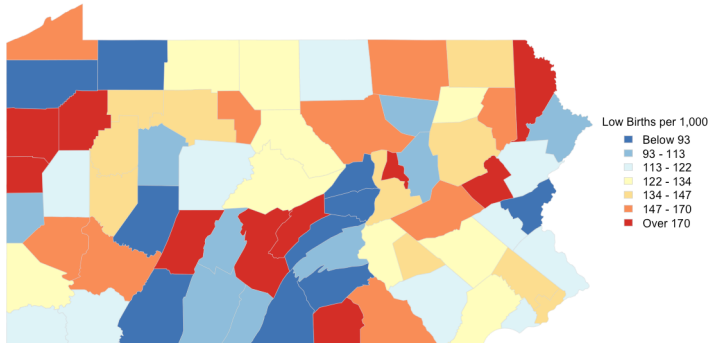
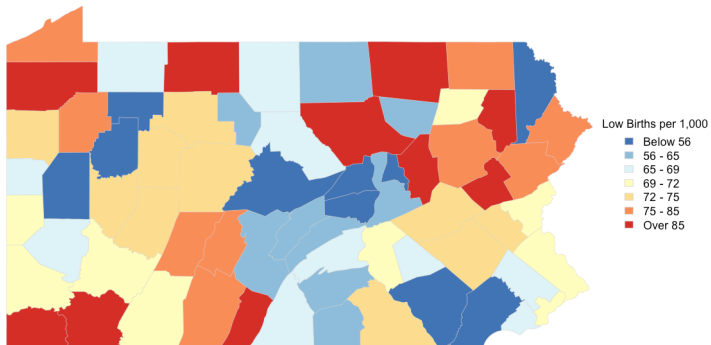
## Problem 4

Log Odds Ratio

Median: 0.84; 95% Credible Interval: 0.39 to 0.97



## Problem 5

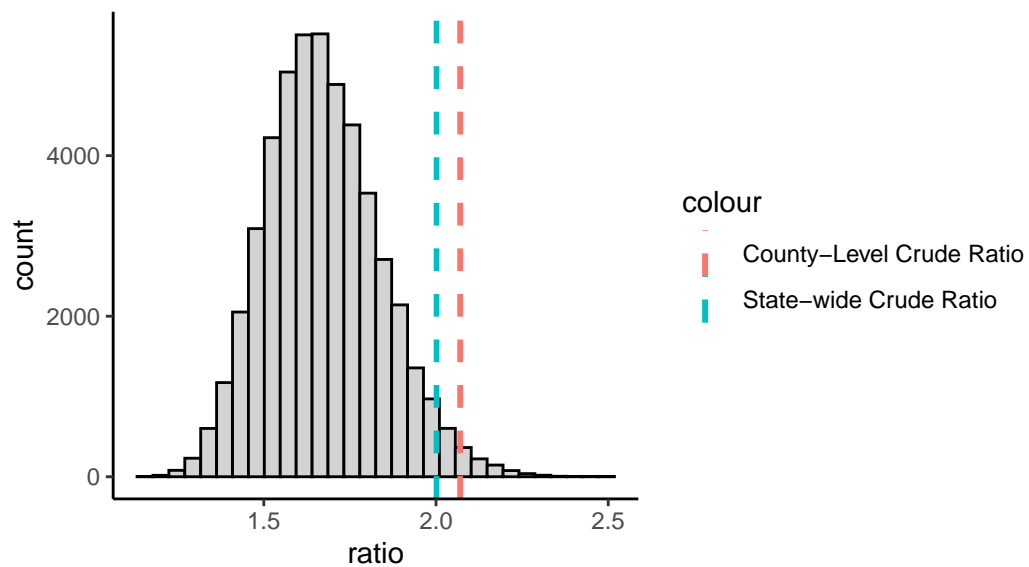


## Problem 6

### Philadelphia County

Racial Group	Y	N	Crude Rate	Estiamted Rate	State-Wide Rate
1	440	6230	0.07	0.09	0.07
2	1251	8557	0.15	0.15	0.14

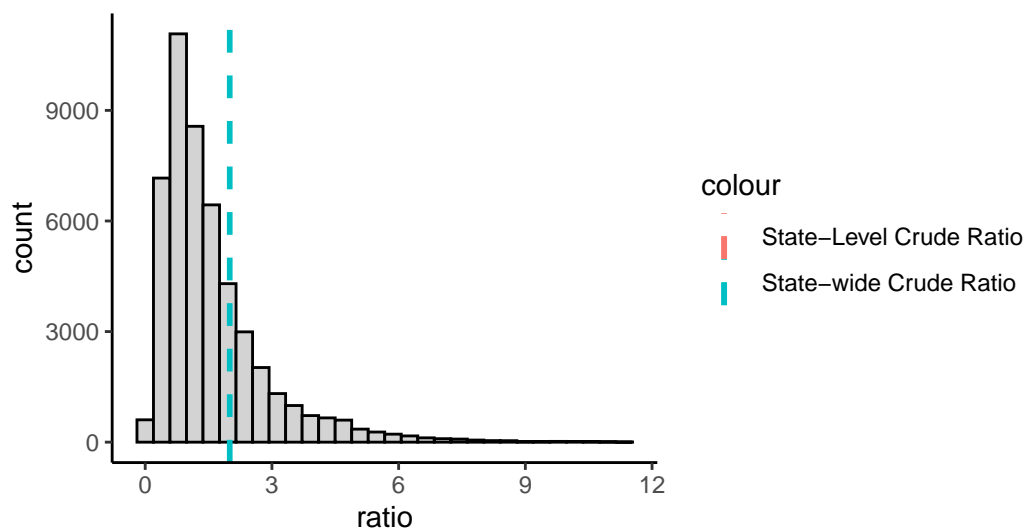
Estiamted Median Ratio: 1.66  
95% Credible Interval: 1.38 to 2.03



### Sullivan County

Racial Group	Y	N	Crude Rate	Estiamted Rate	State-Wide Rate
1	2	40	0.05	0.09	0.07
2	0	0		0.11	0.14

Estiamted Median Ratio: 1.23  
95% Credible Interval: 0.25 to 5.22  
White Births Total: 40; Black Births Total: 0



## Appendix































