I made two sets of models. Model 1 follows the functional form below

Model 2 follows the functional form below

lnMortality10 represents the natural log of mortality for the same cohort 10 years past; ex. For 25 year old males in 1960, lnMortality10 is equal to lnMortality for 15 year old males in 1950. For both models, age categories were broken up into the following categories: 5-9, 10-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70-79, 80, of which the 10-19 age group was treated as the base. Year decades were defined as the 1940s, 50s, 60s, 70s, 80s, 90s, 00s, and 10s, of which the 1950s were treated as the base.

I ran the regressions separately for each of the three gender categories: total, female, and male.

Model 1 lacks series for

After these models were calculated, I made two sets of graphs