

So What's *Really* Going on with Firearm Violence and Mental Health?

Whenever the national conversation turns to the issue of gun violence, the issue of mental health inevitably follows. The idea is, any person who would commit an act of gun violence must be mentally ill, so addressing the epidemic of poor mental health should then mitigate gun violence. But is gun violence truly the consequence of poor mental health, or has mental health simply become a scapegoat to avoid finding the real, harder solutions?

Data

Firearm Violence Rate: Deaths per 100,000 people





Mental Health Rate: Percentage of population with condition

Map

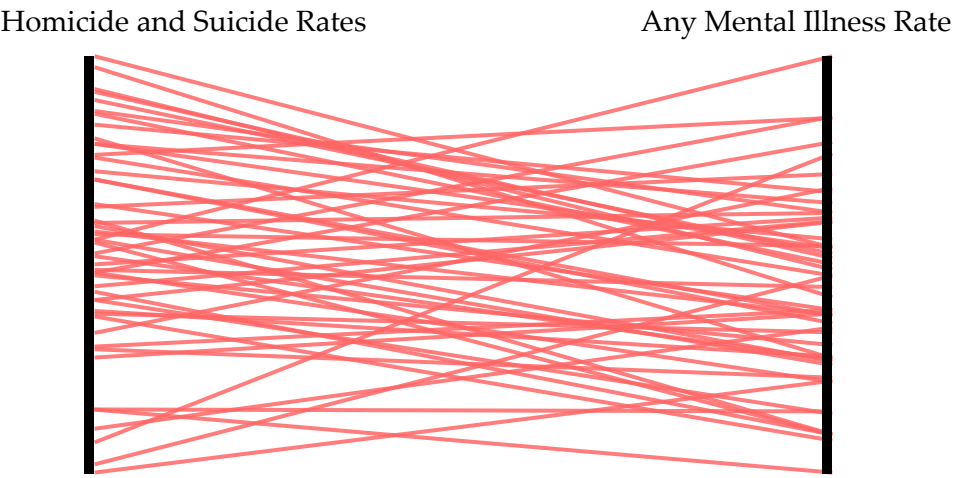
Color:
Low firearm violence rate  High firearm violence rate

Size:
The larger the square, the higher the mental health rate

Parallel Coordinates

-  Default, color has no meaning
- If colored by mass shootings:**
-  0 mass shootings
-  [0, 1) mass shootings per million
-  ≥ 1 mass shooting per million

The Basics



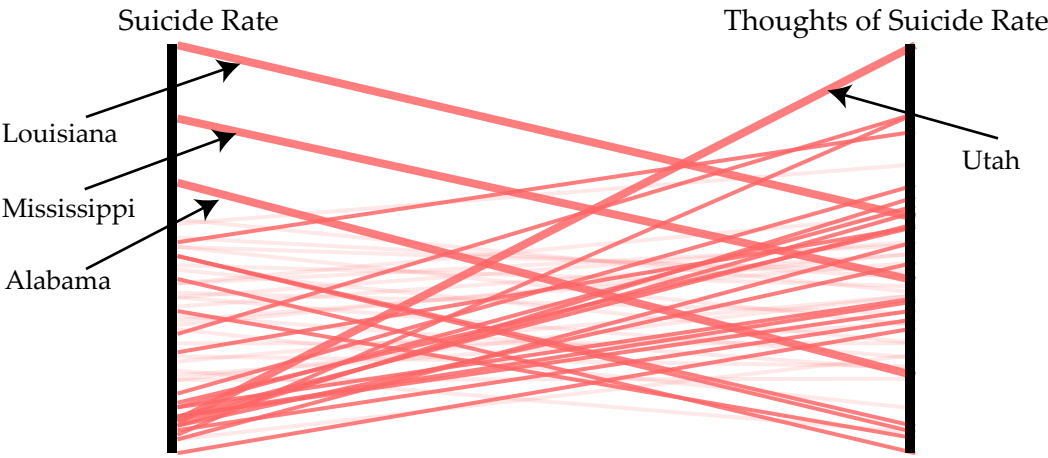
Here we see all gun deaths from homicide and suicide versus the rate of any mental illness. The relationship does not appear to be very strong, as seen by the chaos in the parallel coordinats chart. As seen on the map, the colors of the squares don't seem to depend heavily on the size, but they do seem to cluster by geography, implying that there seems to be some geographic component to gun violence.

More to Mass Shootings?



Here we still consider all deaths from homicide and suicide, but we only consider the rates of serious mental illness. Further, we look only at states with high mass shooting rates. This shows that the states that had the highest rates of mass shootings had no clear pattern amongst the rates of serious mental illness. Illinois, which had one of the lowest rates of serious mental illness, was among the 8 states with the most mass shootings.

The Suicide Contradiction



Here we look at the relationship between gun deaths by suicide and the rate of thoughts of suicide. These two variables should almost certainly be correlated, and yet, half the states show a relatively large difference between them. In fact, Utah, which has the highest instance of thoughts of suicide, has one of the lowest instances of firearm death by suicide. On the other hand, the three states with the highest rates of gun deaths by suicide, Alabama, Louisiana, and Mississippi, all fall in the middle of the pack in terms of thoughts of suicide.

Takeaways

Throughout this visual we have seen a number of examples which provided evidence against the commonly held belief that mental health problems are related to gun violence. We have also seen that there appears to be a geographic component to gun violence, indicating that things like gun laws/gun access likely play a much larger role than mental health.