Data Analysis for AIDS epidemic: Is it rising or falling?

Our group was trying to see if the HIV/AIDS epidemic was rising or falling in the US. We had hypothesized that due to technology advances, education, and representation in media the epidemic would be declining. Our findings were negating that bias, it is rising.

First we analyzed age. We found that the highest age group between 2011 to 2017 were individuals around 50, at 22520.85. We didn’t find data that said when they contracted HIV, just that they had it during 2011-2017. The lowest group were ages 12-14 with 77 cases.

We then analyzed if the actual cases were rising and falling between the years of 2011 to 2017. The counts rose steadily every year. 2011 had 473948 and 2017 had 540328 cases.

After actual cases we analyzed the reason for contraction. The biggest type was male to male sexual contact at 85485 cases. The smallest was other, at 136 cases. This caused a huge jump in our bar graphs where other was practically invisible.

Next we analyzed Gender. The highest rate were cisgender men at 110239 cases. The lowest was other, which was at 5. We showed this difference with a box plot.

Lastly we checked death by state. I had not expected Florida to have such a high rate. The highest was New York. We looked at data from 2011 and 2017 to see if that changed, in 2017 the highest was Florida.

In conclusion, the AIDS/HIV epidemic is rising, with cisgender men participating in male to male sexual contact being the largest group to be affected by HIV/AIDS.