

In checkpoint 3 we looked at two visualizations of the data to answer questions about the types of complaints black residents are submitting. The first visualization, the stacked bar graphs, compares the types of complaints black residents are submitting in each police district to the types of complaints all residents are submitting. What is important to look at are not the numbers because many of the allegations have missing race data. Instead the proportions of complaints types in the two graphs tell a larger story. We assume that race data is missing randomly across all races so the proportions of complaints submitted by each race is consistent. In the data for all residents, the top six complaint types on average are, Operational/Personnel Violations, Use of Force, Verbal Abuse, Traffic, and Lockup Procedures. The order of verbal abuse, traffic, illegal search, and lockup procedures are not always the same, but Operational/Personnel Violations is the most common complaint type in every beat except for beat 1533 which has 46 more Use of Force complaints and beat 1530 which has 1 more Use of Force complaint. These are the only instances in which Use of Force is first and Operational/Personnel Violations is second. Looking at the data for black residents, the top five complaint types on average are Use of Force, Operational/Personnel Violations, Illegal Search, False Arrest, and Lockup Procedures. Unlike for all residents, the complaints are highly concentrated in these 5 categories and the order of complaint type frequency is almost always in the order above.

The data for Black residents is indicative of two phenomena. First, the higher complaint frequency of Use of Force compared to all residents suggest Black residents are more likely to be victims of physical force from police, whereas all residents are more likely to be the victims of verbal abuse. Second, illegal search complaints are much more frequent than for Black residents than the average of all residents. Because illegal searches complaints are typically filed when the officer searches an individual without enough prior reason, it seems as if Black residents are being targeted by the police disproportionately. Moreover, the high concentration of false arrest and lockup procedure complaints also reinforces the idea that Black residents are

being targeted. Among all residents, false arrest complaints are not even within the top six most common, but among Black residents false arrest complaints are the fourth most common complaint type, suggesting that Black residents are more likely to be the victims of this specific type of police misconduct.

Similarly, by looking at the heat map we were able to come to a similar conclusion. The fewer the proportion of Black residents in a police district, on average the larger the gap between Use of Force and Operational/Personnel Violations complaints. We can thus again conclude that Black residents are more likely to submit complaints about Use of Force than all other residents. Because the heatmap works with numbers and not proportions of complaints, it is most helpful to compare complaint types within the same police district. By doing this we see a familiar pattern to the stacked bar graphs unfold. Districts with higher proportions of black residents are more likely to have proportionately more illegal search and false arrest complaints.

Our two data visualizations paint a picture of police misconduct based on the racial demographics of a police district. Black residents are often the subject of different types of police misconduct than other residents are, and as a result neighborhoods with higher proportions of Black residents are more likely to have higher counts of certain misconduct complaints. We can see that Black residents are being policed differently than all other racial demographics in Chicago. However, it raises the question about cause and effect. Are Black residents more likely to be on the receiving ends of use of force, illegal arrest, and illegal searches because they act differently as a result of their past mistreatment by police, or are they simply consistently targeted by police for these specific types of misconduct. Either way Black residents of Chicago are not being treated the same as all other residents by CPD.