Collaboration with Kathleen Anderson

2. China CDC (Chinese Center for Disease Control and Prevention, briefly as China CDC) is a governmental and national-level technical organization specialized on disease. CCDC is a government organization which they collected data from local hospitals and national hospitals. Since this is a nation government organization, it has the power to access data immedically and correctly. Also, this organization plays a huge important role in reporting confirmed cases in China, as well as CDC in American. So I believe this is a reliable organization.

1Point3Arces is a BBS website which used to provide data for undergraduate to apply grad school. They manually aggregate data from official government websites and latest new reports. As long as they are not collecting data from fakes news, their data is reliable.

WHO ( world health organization) basically aggregate data from each country’s reported data. Obviously, reliable.

11. In the data frame, we set up three values of death, diagnosis and cure, all of which correspond to the corresponding time axis. As time goes on, the growth rate slows down, the mortality rate decreases, and the cure rate begins to increase.

13. On the basis of question 11, the variable of image color is added. The growth rate slowed down, the mortality rate decreased, and the cure rate began to increase. But the total number of cases has increased.

20. Hypotheses:

As the Confirmed Cases go up, so does the death rate.

As Death Rates go up, so do the recovery rate.

As recovery rate goes up, so does confirmed cases.

I think all three assumptions are correct. If someone is diagnosed, someone will surely die and someone will be cured. The reason why the number of confirmed cases is soaring is that most people didn't take it seriously before the adoption of stay home order. Attend large parties, go to restaurants, do not wash hands, go to crowded places, do not wear masks and so on. After half a month of self isolation, the number of people diagnosed every day has declined, but this does not make us take it lightly. Before the clean-up, I think the government should advocate less going out, keep a safe distance between people, do not go to places with more people, and try to wear masks if you want to go to places with more people. If stay home order is no longer implemented, I think there will be many young people who will have revenge parties. This may lead to a second outbreak of the disease. And if schools resume classes, it will be a big hidden danger.

22. I used this website for this question: <https://blog.ephorie.de/epidemiology-how-contagious-is-novel-coronavirus-2019-ncov>

So in this model, we see that the black line represents the people who may be infected, the red line represents the number of confirmed cases, and the green line represents the number of cured cases. 0 day refers to the first day of outbreak in the United States. In this model, we can see that there is not a sharp drop in the number of people who may be infected, which means that if we do not take compulsory measures and all people are isolated at home, the risk of infection is considerable. But on the 100th day of the outbreak, all three lines will reach the turning point. This model provides an image of the future growth trend, so we can know about when the epidemic will improve. I don't think this is a particularly good thing. Even if we reach the turning point in 100 days, according to the current growth rate, most people in the United States will be infected..