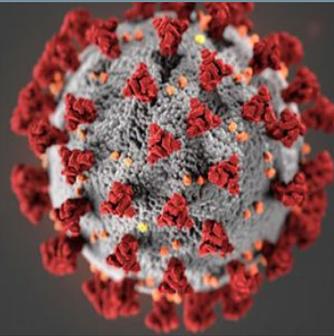


Coronavirus

(COVID-19)



Covid-19 Statistics in the US over the course of the Pandemic

Mr.Castro

Sierra:Hello, and welcome to our TEDx Kinda Talk! My name is Sierra Martinez and my partner is Tania Ibarra and today we are here to talk about the effects of Covid-19 in the United States of America since it first started up.

Tania:So sit back and relax while we inform you about the statistics of the ongoing pandemic in our very own country.

WHY the Pandemic?

- COVID-19 affected entire world
- Why isn't US covid free?
- When will go back to "normal" ?
- Don't know all the numbers
- Curious on effects of entire country
- Are the numbers as bad as we think?
- How many people have been affected ?



Sierra: We know that you may not know what is going on with our entire country during this tough time, therefore we decided to inform ourselves on the numbers that have affected our country during the span of COVID-19 in the US. With contracting the virus first-hand, we thought it would be interesting knowing how this virus has affected our country as a whole.

Tania: Knowing that countries such as New Zealand are completely covid-free has led us to wonder how severe the amount of positive cases and deaths have been within our home country. We believe that just because we are teens does not mean we cannot inform ourselves of what's going on in our country from this virus. It has carried on for over a year now and just like many others, seeing its numbers will help us predict when we will finally be able to live life close to normal once again.

Hypothesis for the "End":

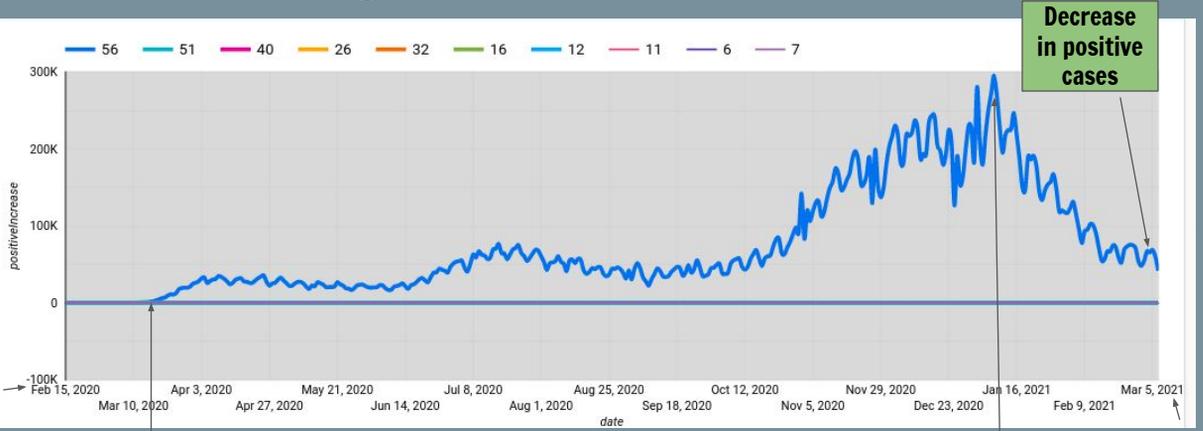
We believe that the pandemic in the United States will almost completely diminish by the beginning of 2022.



Sierra: We believe that in order for the effects of covid-19 to continue to decrease in the US where we are almost completely back to normal will take up the entire rest of the year.

Tania: Therefore after examining the statistics we have found on the numbers in the US during this course of COVID-19, our hypothesis is that the United States of America will be close to completely covid-free by the beginning of 2022.

Linear Regression: Positive Case Increases



20
20

2
0
2
1

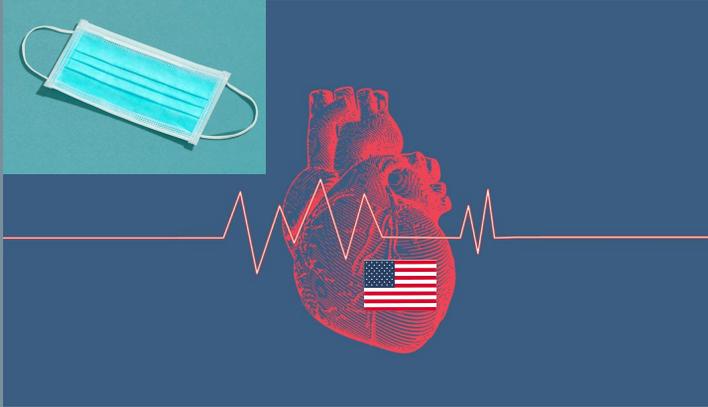
Interpretation: Continual Rollercoaster

- ❑ **Beginning increase: March 2020**
- ❑ **1st major decrease: August 2020**
- ❑ **Most drastic decrease: December 2020**
- ❑ **Peak of Positive increases: January 2021**
- ❑ **Steady decrease in cases: Feb.-March 2021**

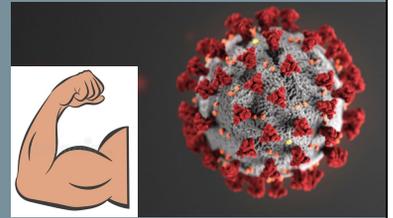


Sierra: In this linear regression graph we are shown the number of positive increases by the 100 thousands over the course of February 2020 up until March of 2021. We begin to see the upward increase in positive cases during March of 2020. The graph slowly fluctuates up and down as the course of our lockdown was occurring. The first drastic change in the graph is shown during August of 2020 as we see a major decrease in positive cases. After this month we see a major upwards increase in cases up until Christmas day of 2020 where there was a major drop in cases. With this graph we also see the peak of increase in positive cases in January of 2021 as we experience our 2nd lockdown. There is a continual fluctuation of increase and decrease over the course of 2021, although we are now seeing more steady values in the months of February-March where the number of positive increases are in the values of 60-70,000.

Inference/ Connection: Covid-19 War

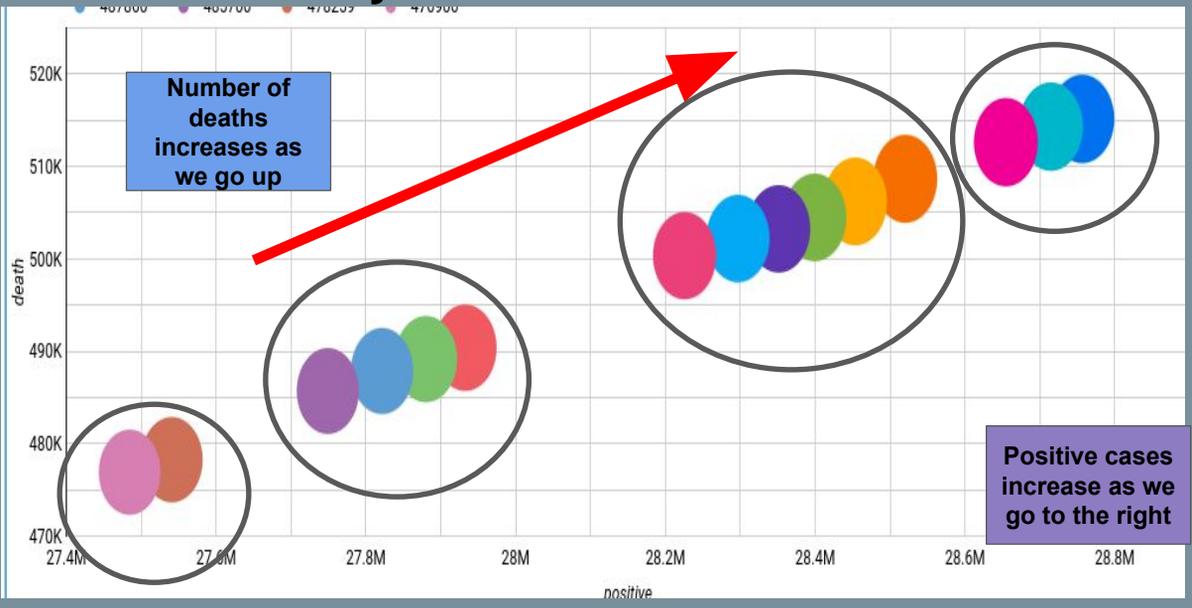


VS



Tania:After interpreting this information we believe that the number of positive increases will steadily continue to decrease over the course of 2021 in order for the US to finally recover in 2022. The information and entire situation can be seen as a heartbeat, the heartbeat of our dear country. Just as we each have our own heartbeat that needs to stay at a steady level to live, the heartbeat of our country needs to continue to fight through this pandemic in order to reach the place we were once in before. It is ultimately up to the safety measures we continue to take during the duration of 2021 as we,as a country, must not let our guard down and win the fight between Covid-19.

Viz #2-Cluster Analysis: Positive Cases and Deaths Increases



Interpretation

- **Steady cases = people @ home & following regulations**
- **Increase in summer = people going out**
- **increase= holidays Halloween, Thanksgiving, Christmas, and New Years**
- **Increase= Spring Break**
- **If strict rules/regulations= people stay home & safe = control the numbers**



Tania:Off the bat we can see that as the number of positive cases increase so do the number of deaths increase. If more people are getting infected then of course it would lead to more deaths in which both numbers go hand in hand.

Sierra:If the positive cases were close to each other in the thousands then so were the number of deaths. Once there was more cases by a million there was more deaths by a thousand.

Tania:If the cases were steady and similar the deaths would stay steady but once there was an increase they would automatically jump to a higher number until remaining steady again.

Inference/ Connection

More getting sick + no proper treatment



THEN



More deaths



If positive cases controlled/ little change--> no change in deaths



If positive cases go up dramatically --> deaths increase/stay steady

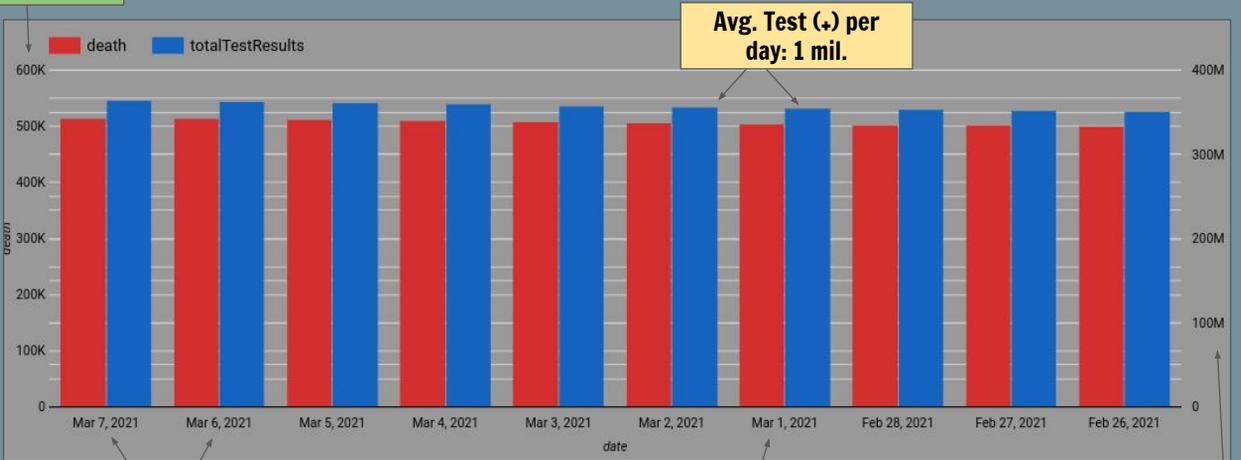


Tania: This very much happened a lot here in my area. When the numbers were increasing for positive cases everyone got scared and had decided to stay at home and watch their distance. As soon as they would see that the numbers wouldn't increase so much because they would stay the same for a while they would somehow think it was fine to go out. As they would go out not only would they get exposed but also expose others.

Sierra: This would make the numbers of both positive cases and deaths increase. It would be such a continuous pattern and still is. We see that there is a steady amount and automatically think it's safe to continue with our normal lives.

Death: By 100 thousand

Outlier: Deaths vs. Total Test Results



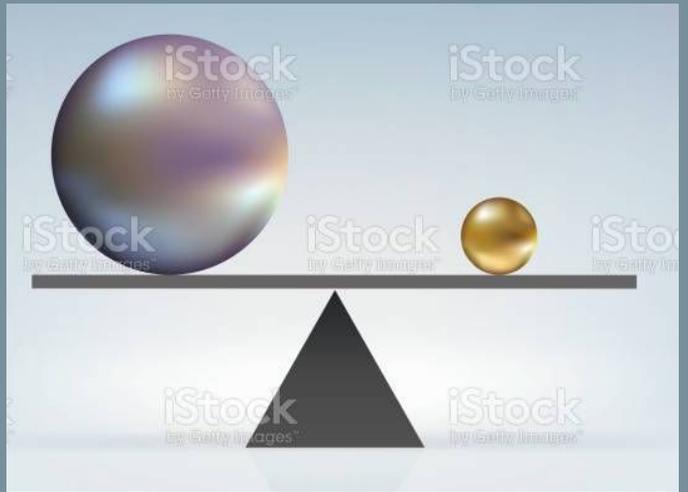
Avg. (+) per day: 900 deaths

1 week: 1st-7th 10,000 death (+)

Tests: By 100 million

Interpretation: 1 v 706

- Avg. Deaths per day: +900
- Avg. Test Results per day: +1 million
- Deaths read by 100K
- Death read by 100M
- 1:706 Death vs TTR



Sierra: The outlier graph we see here represents the amount of deaths by the 100 thousand compared to the total test results by the 100 millions. While the graph does not show a major difference in dates, it does show that the average increase in deaths per day is about 900. On the other hand, the average increase test results per day 1 million. When comparing the amount of deaths to the total test results, there is one death for every 706 total test results. We also see that there is a gradual increase in both deaths and total test results per day, as there was no major jump or increase in the past two months.

Inference: Vaccine is key ?

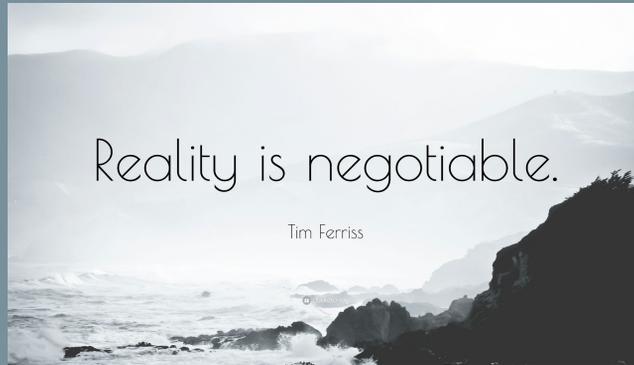
- ❑ risk to save country
- ❑ effect numbers
- ❑ decrease the rates per day
- ❑ truly effective or not
- ❑ help or harm



Tania: New statistics on the effect of the vaccine on death increases could possibly be a factor that changes the graph, although since that information has yet to be tracked it is still a major question. A prediction we believe will occur in this graph is a decrease in the amount of deaths, since the vaccine could possibly save more lives than before the vaccine came to be. Although, vaccines are also the key to getting the entire country closer to a covid-free country once again. While there are many concerns on the effectiveness of the vaccine, we believe that it is a risk the country must take in order to save their own lives and the lives around them from this ongoing pandemic.

A Dream or Reality?

Based off of present information and our predictions, we believe that being covid-free in the US by 2022 is achievable with continuous precautions.



Sierra: Based off of the evidence from the graphs and the information we have acquired from real-world information, there is a chance of the US being covid-free by 2022. While this may seem like a long-shot to many, we are already seeing gradual decreases in the number of positive cases as we see the growth in medical advances. Although, in order for this to become true-reality it depends on the citizens and our actions, for if we do not stick together as an entire country we will begin increase cases once again little-by-little.

Analyses Revisited

- Steady Decrease in (+) covid cases
- Gradual death increase
- No major increases per day
- More covid test available



Tania: If we are going based on the data provided on the graphs we hope to see that by the year of 2022 we will soon see an end to the pandemic. As we see the graphs we know that by the matter of the time the deaths are dropping and so are the positive cases. We know that this is happening due to the fact that the government has enforced many regulations and stay at home orders in which helped control the numbers. In some occasions the numbers did rise but as we know they were obvious to be that high during the time of holidays because of the gatherings. As we know the decrease in numbers also have to do with the new vaccines. They have been distributed and many people have taken them. Soon we hope for the vaccine to be available to everyone and hope to the end of this pandemic.

**THANK YOU for attending our TEDx
Kinda Talk!**

- **Wear your MASK**
- **Continue to social distance**
 - **Get Vaccinated**
- **Don't let your guard down**
 - **Stay Informed**
 - **Stay Safe**



END.

THANK YOU

Sierra: While the pandemic is possibly coming to an end, there is still a chance in the entire situation backfiring if we do let our guard down. In order to be united safely as an entire country where we are covid-free we must continue to practice social distancing and continue wearing masks in order to decrease exposure. A major plus in staying safe from the virus would be getting vaccinated, although practicing all of these safety precautions is just as effective with or without being vaccinated. No matter who you are or how old you are, you have the right on staying informed on the ongoing issues of our country for your safety and the safety of others. We hope you continue staying covid-safe throughout this pandemic and have patience, for the end is possibly near. We truly appreciate your attention throughout our TEDx Kinda Talk and we hope to see you again!