Hawaii COVID Data Analysis

Kody Kerbox

University of Hawaii Maui College

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Living through the modern-day pandemic we are facing with COVID-19, keeping track of the data has been a productive way to stay up to date in the fight we are all facing. Watching the Hawaii data in particular has been a relatively fathomable way to look at the numbers that we can see growing county by county every day. Looking at data from places like New York is overwhelming and hard to wrap your head around, while the data in Hawaii is something that is easier to understand and closer to home. The Hawaii officials have done a great job at updating the number of cases every day at 12pm, which makes checking the updates something to look forward to in hopes for a plateau of case numbers.

Starting my individual data tracking with a simple spread sheet to keep track of corona virus cases in Hawaii by county was what I based my data collection around. For me this was the best way to really track what the virus was doing in Hawaii and the counties most affected. As someone who was born in the islands and grew up with many lots of family and friends scattered across the state, watching this data was especially important to me. From the first day I started collecting this data on April 7th, Oahu had by far the most cases at 312 while Kauai sat at the lowest number of reported cases with only 18. Maui had 48 cases reported, and the Big Island came in at 23 with both counties falling in between the high and low of Oahu and Kauai. As the days progressed and the data started adding up, it was clear that Kauai was doing the best job at containing the virus as they slowly notched up only three more cases reaching 21 before topping out for the remainder of the data collection period. Oahu was not as lucky as they notched up between 10-20 new cases daily reaching 399 by the end of the month. The big island maintained a steady increase with only one day having a significant increase of 20 cases, but their top out total came out to be 3x the amount they started with coming in at 73. Maui more than doubled their cases over the data collection period with a steady increase over the three-week period.

Collecting data on cases by exposure was another great way to see how the virus was affecting Hawaii, though it did not make the same impact the way collecting new case counts by county did. Looking back on the trend of the data however, shows a significate shift from new cases coming from travel at the beginning, to switching over to community spread by the middle of the month. This makes sense from a logical standpoint as the virus was brought here through travel and then spread throughout the community once it was here.

The final piece to the data collecting puzzle that I have been working towards comes in the form of a Google Colab page. This was an extremely exciting new way of looking at calculating and analyzing data as the page is made up of both text and working code. The software allows you to run code within it to import data from any dataset available. The data collected was based of the NY times datasets that offered a tremendous amount of data from the entire country, giving insights into how the corona virus was affecting the entire nation. The Colab page made importing, collecting and updating the data easy and fun while enabling the use of visualizations to be updated with the push of a button. This allowed a close examination of what was happening in the hardest hit states that were showing scary numbers of cases that were ravaging the communities in places like New York, Michigan and New Jersey. This helped bring into perspective how serious this virus has been, and how lucky we are to live in Hawaii.