Team 6 COVID-19 Policy Analysis

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In serving the Commonwealth of Caladan, we focused specifically on COVID-19 mitigation methods that were more permissive and less restrictive, according to the government's request. Specifically, we aimed to keep case growth rates below 3% and death growth rates below 1% month over month. In doing so, we targeted our analysis on the nations of Sweden and New Zealand, the two countries in our dataset that were relatively close in population to Caladan's 3.2 million. These two countries also happened to be incredibly different in their COVID-19 policy methodology: while Sweden's policy was initially very relaxed, New Zealand's policy was very restrictive. This allowed us to compare and contrast the effects of more restrictive measures.

In our analysis, we found that workplace closings, restrictions on gatherings, and face covering requirements were the most effective methods of mitigating the spread of COVID-19, without taking the more extreme measures of shutting down borders and requiring disruptive stay-at-home mandates. While these policies may have been more effective in curbing the immediate spread of the virus, they would have caused massive disruption to the nation's economy. In New Zealand, companies suffered massive losses due to the country's strict

COVID-19 border policy: Air New Zealand, for example, reported losses of $289 million due to the country's restriction on international travel.[1]

We believe that workplace closings are a dynamic policy implementation that can be easily implemented. In our analysis, we found that when Sweden increased workplace closing restrictions to a "level 2" (require closing or work from home for some categories of workers), they were able to mitigate a growing change rate and keep the change rate under our success metric of 3%. Note that New Zealand took a harder, "level 3" (require closing for all but essential workplaces) approach and found even better results: in that country, case growth rates never went above 0.015%. However, Sweden's "level 2" approach is sufficient in curbing COVID-19 growth rates below 3%.

We also found gathering restriction policies to be effective. In New Zealand, a dynamic approach was taken: with every spike in COVID growth rates, New Zealand increased to a hard "level 4" approach of restricting gatherings to 10 people or less, but once the spike dropped, they went back down to restricting only large gatherings (above 1000 people) or no restrictions at all. This proved to be effective in curbing the growth rate altogether. On the other hand, Sweden maintained a "level 3" restriction on gatherings below 100 people, which proved to be effective up until the spike in cases in winter of 2020. After Sweden implemented "level 4" restrictions in response to this spike, case growth consequently declined.

Lastly, we saw that face coverings were extremely effective in stopping the spread of cases in the first place. After New Zealand implemented face coverings, cases never spiked to the same growth rate as before the mandate. And in Sweden, face coverings were not

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[1] "Air NZ reports $289m loss amid closed borders," Radio New Zealand, August 26, 2021, https://www.rnz.co.nz/news/business/450037/air-nz-reports-289m-loss-amid-closed-borders.

implemented until January 2021, leading to much higher COVID rates than in New Zealand. However, after face covering requirements were implemented, cases dropped significantly.

Moving forward, Caladan should focus on consulting their own policymakers and citizens to see what policies they deem worthy of implementing. Every country is different, and factors such as geographic isolation and population age density have an effect on which COVID policies work better. Caladan officials should look to implement the immediate suggestions we have listed above while continuing to monitor COVID-19 case growth in the country.