Pfizer and COVID Analysis

In December 2019, the COVID-19 worldwide pandemic began, and in subsequent months, the death toll across the world increased. We found in the data provided that the death toll reached a peak in March 2020 with the USA leading, followed by Brazil and India subsequently (John Hopkins University, 2023).

Pharmaceutical companies, including Pfizer, have spent months researching potential vaccines to combat the COVID strap. Most companies are already at an advanced stage in the improvement of mRNA technology for vaccine production. The vaccination efforts started in late 2020 and early 2021 as the first vaccine was administered on 14th December, 2020 (Kriss et al., 2021). Numerous pharmaceuticals have launched their vaccine with a degree of access created across the world.

As vaccines have become more available, there is an immediate impact in the cases of deaths reported amongst most countries. After analyzing the data set, we found that the vaccine distribution has led to a fall in death cases across the world. It did not completely stop deaths but has flattened the curve. While deaths have lowered, new cases haven't immediately followed suit. The reason being that vaccines have helped a lot to prevent death, but they're not as successful stopping everyone from getting infected, especially since restrictions have been lowered and there's more mobility around the world.

In the analysis of the daily administration of vaccines by country, our findings show that there has been a general upward trend in the global uptake of COVID-19 vaccine over time with several peaks of variability in the graph across countries. The biggest surge occurring in May 2021, just as the vaccine's global reach and response is at its most aggressive. At individual country level, we've seen mixed responses due to different national conditions and people's perceptions of COVID-19.

Several countries have faced challenges with access to vaccines, especially those in Central and West Africa, Eastern Europe, as well as a few Arabian states that experienced delays in vaccine distribution, evidently due to their lower-income status (Lawal et al., 2022). Countries in Africa have the lowest percentage of fully vaccinated populations.

The COVID-19 Vaccines Global Access (COVAX) initiative has aimed to address the issues around vaccine distribution by coordinating vaccine donations, expediting reviews, and facilitating manufacturing capacity expansion. Yet, due to supply shortages and some countries bypassing COVAX, the equitable distribution goal has been facing challenges (Khairi et al., 2022). Innovative commercial approaches and partnerships are required to ensure the distribution of vaccines to the deprived regions, without losing commercial targets for Pfizer.

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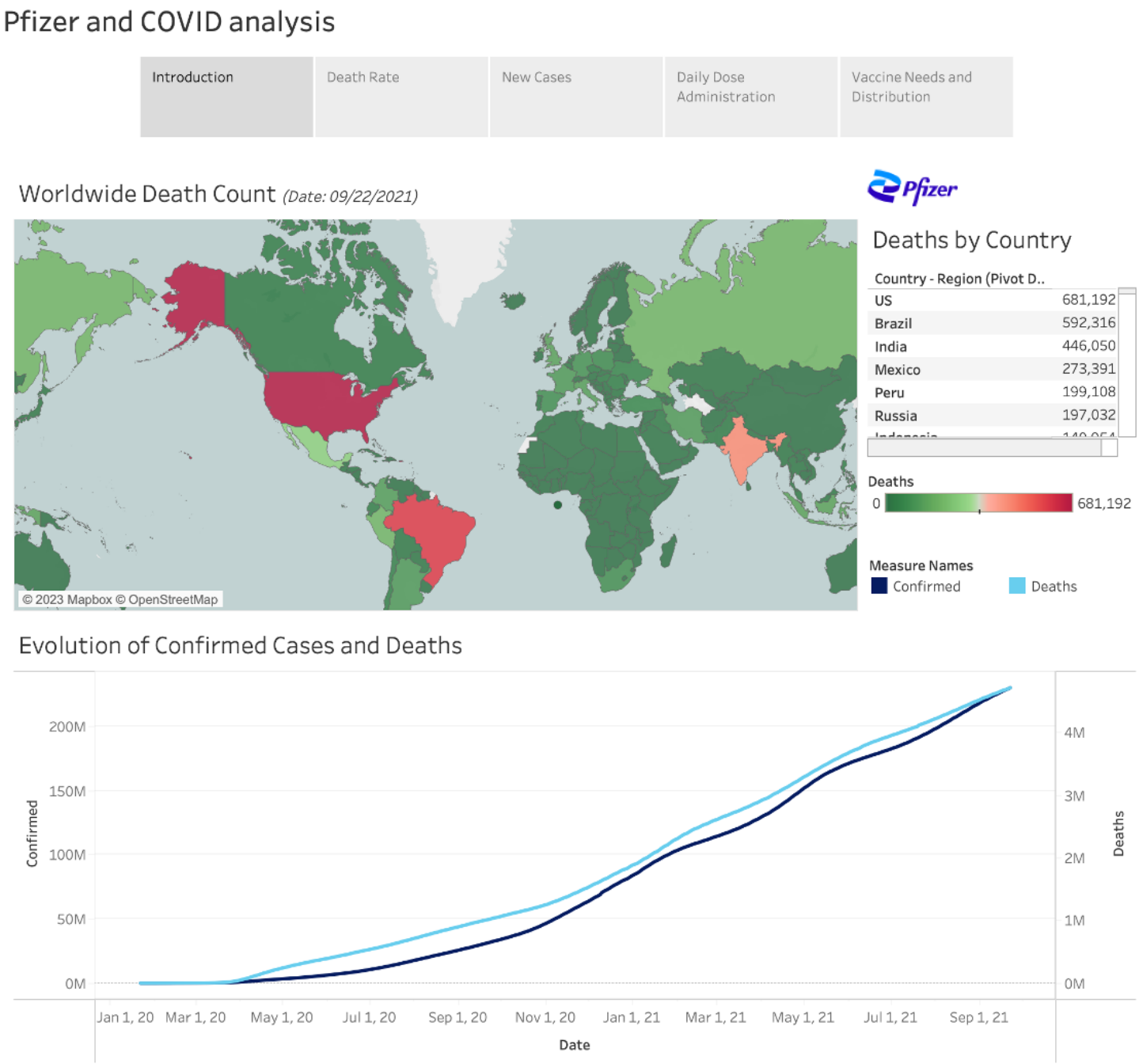
Youtube Video:
https://youtu.be/ZS--B3xyetk

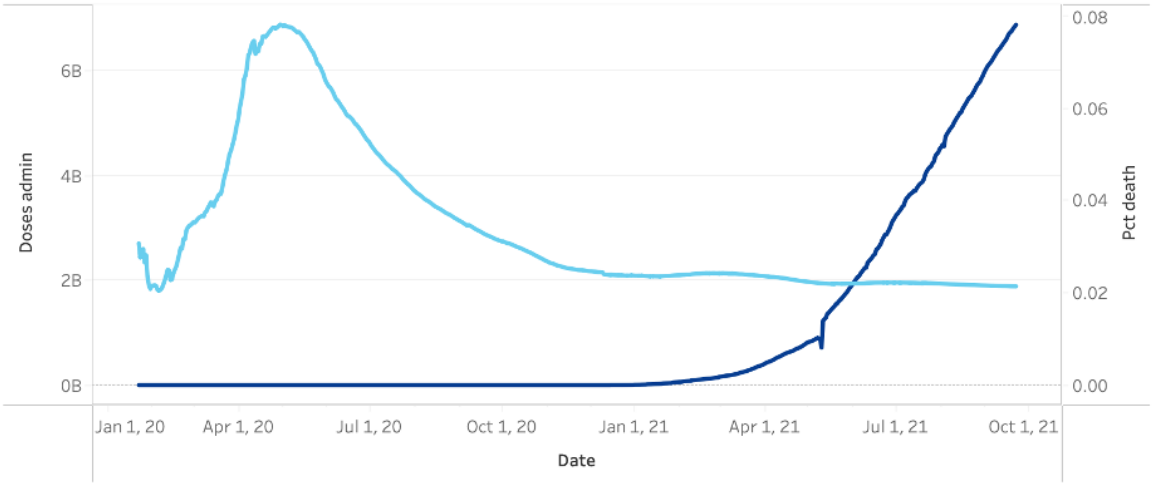
Tableau Dashboard



Pfizer and COVID analysis

Introduction | **Death Rate** | New Cases | Daily Dose Administration | Vaccine Needs and Distribution

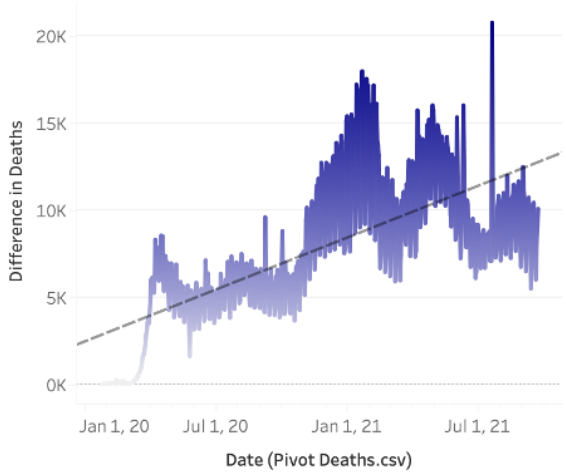
Vaccination and mortality through time



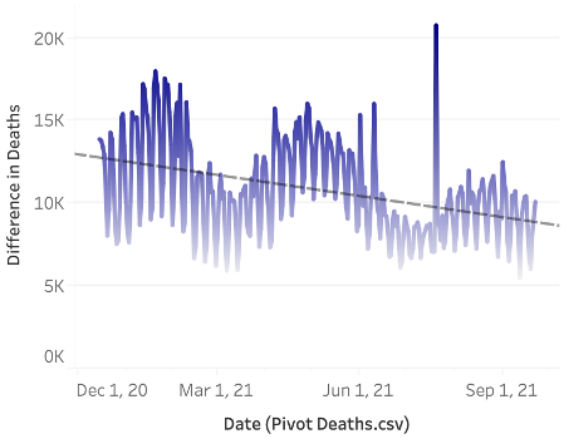
Country
- Null
- Afghanistan
- Albania
- Algeria
- American Samoa
- Andorra
- Angola
- Anguilla
- Antigua and Barbuda
- Argentina
- Armenia
- Aruba
- Australia
- Austria
- Azerbaijan

Measure Names
- Doses admin
- Pct death

New daily deaths



New daily deaths (after vaccination started)



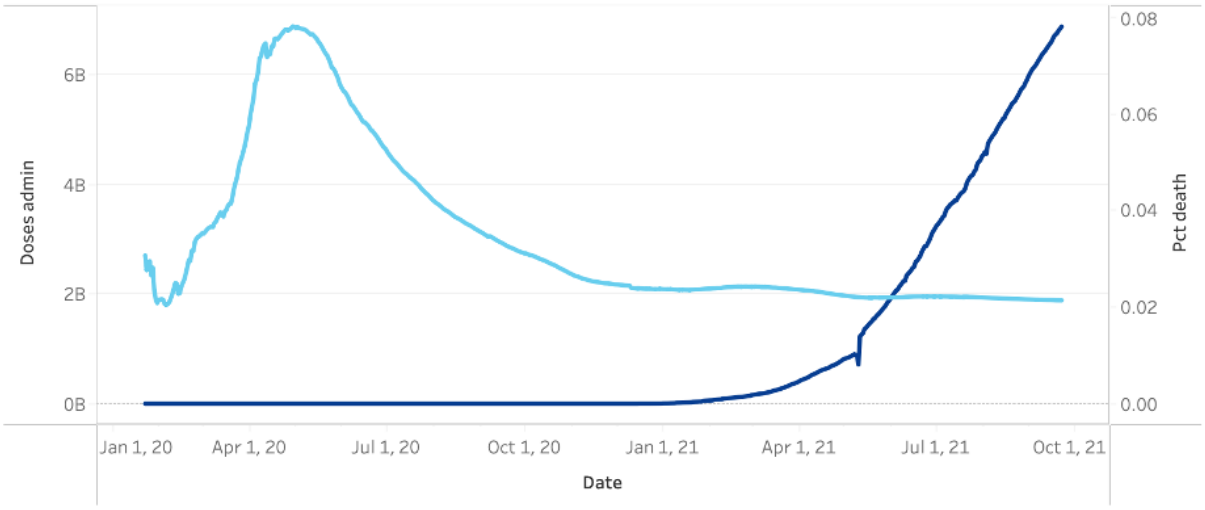
Difference in Deaths
1 — 20,756

Vaccinations have led to a significante decrease in daily deaths, demonstrating the effectiveness of the vaccine in preventing fatalities.

Pfizer and COVID analysis

Introduction | Death Rate | New Cases | Daily Dose Administration | Vaccine Needs and Distribution

Vaccination and mortality through time



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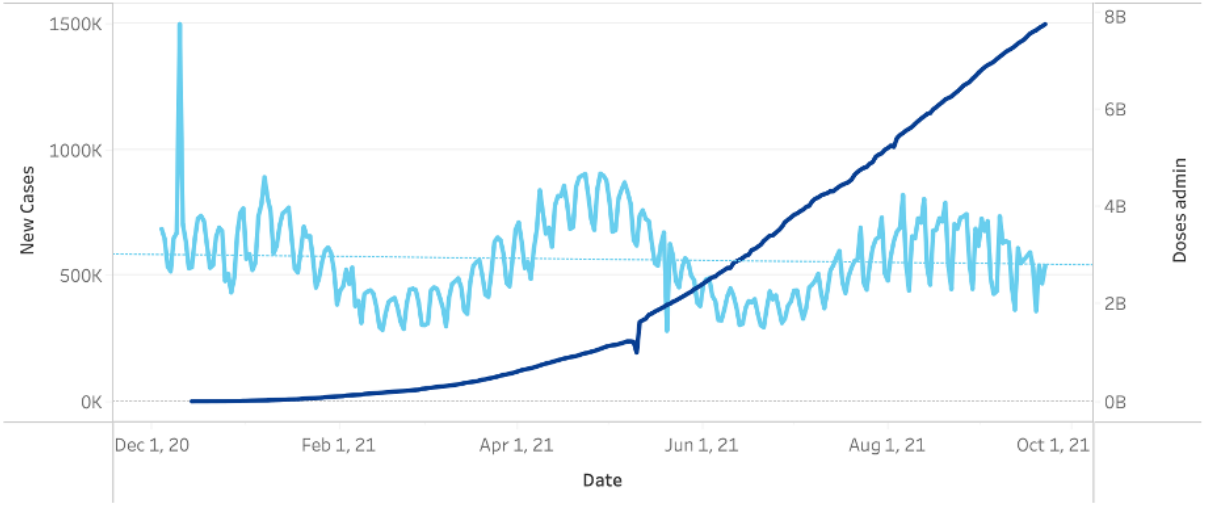
Measure Names
- Doses admin
- Pct death

New Cases

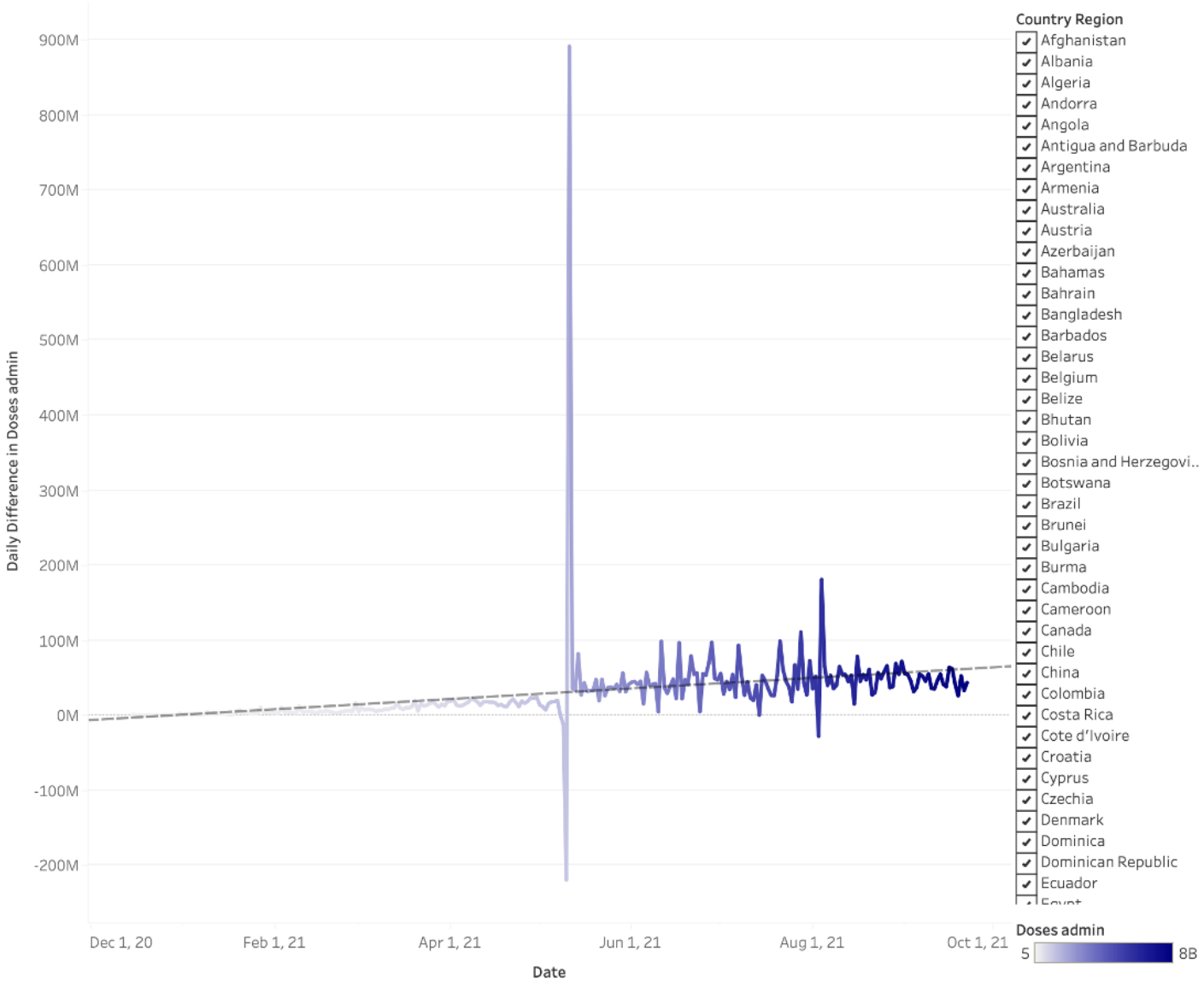


Measure Names
- Doses admin
- New Cases

For COVID, vaccines played a crucial role in mitigating severe illness, resulting in a decline in the death rate. Although new cases slowed down and curves were tempered post-vaccination, increased public activity make the declining trend harder to notice.

Pfizer and COVID analysis

Introduction | Death Rate | New Cases | Daily Dose Administration | Vaccine Needs and Distribution



Pfizer and COVID analysis

Introduction	Death Rate	New Cases	Daily Dose Administration	Vaccine Needs and Distribution