Introduction

COVID-19, caused by the novel coronavirus SARS-CoV-2, emerged in late 2019 and quickly spread globally, resulting in a pandemic. It led to widespread illness, with symptoms ranging from mild respiratory issues to severe pneumonia, particularly affecting the elderly and those with underlying health conditions.

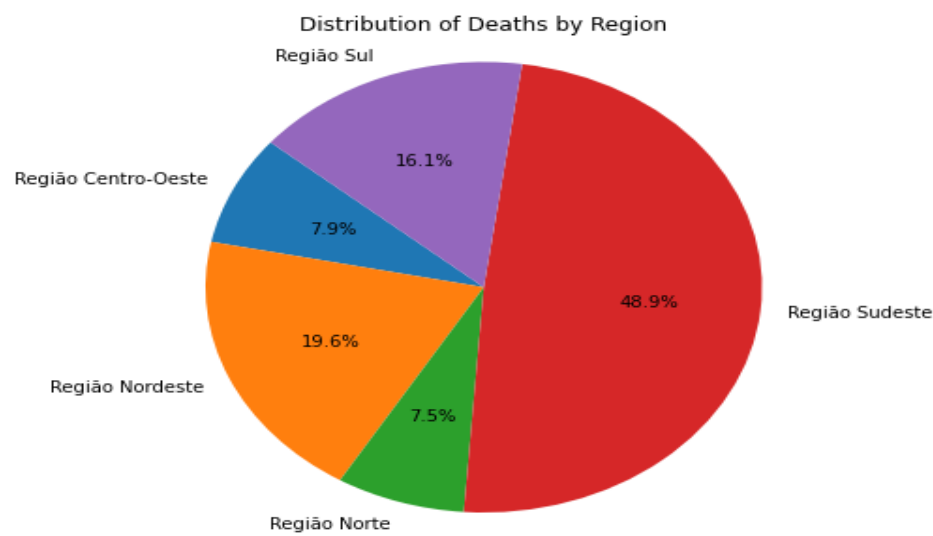**Pie chart of the number of deaths by region in Brazil**

Fig. 1 - Graph of the number of deaths by region in Brazil

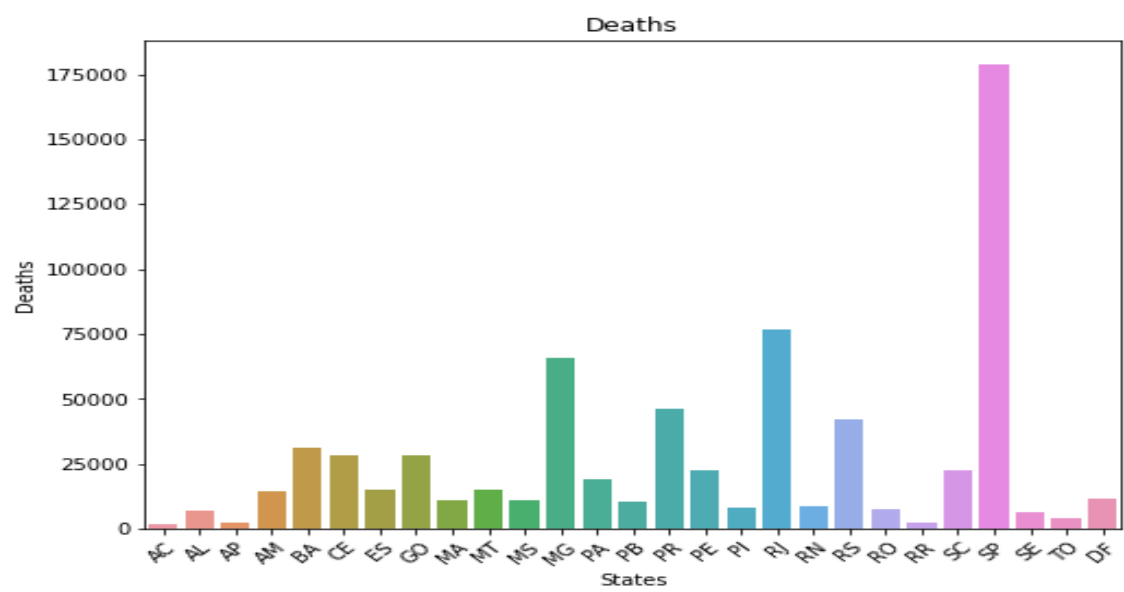**Graph of the number of deaths by state in Brazil**

Fig. 2 - Graph of the number of deaths by state in Brazil

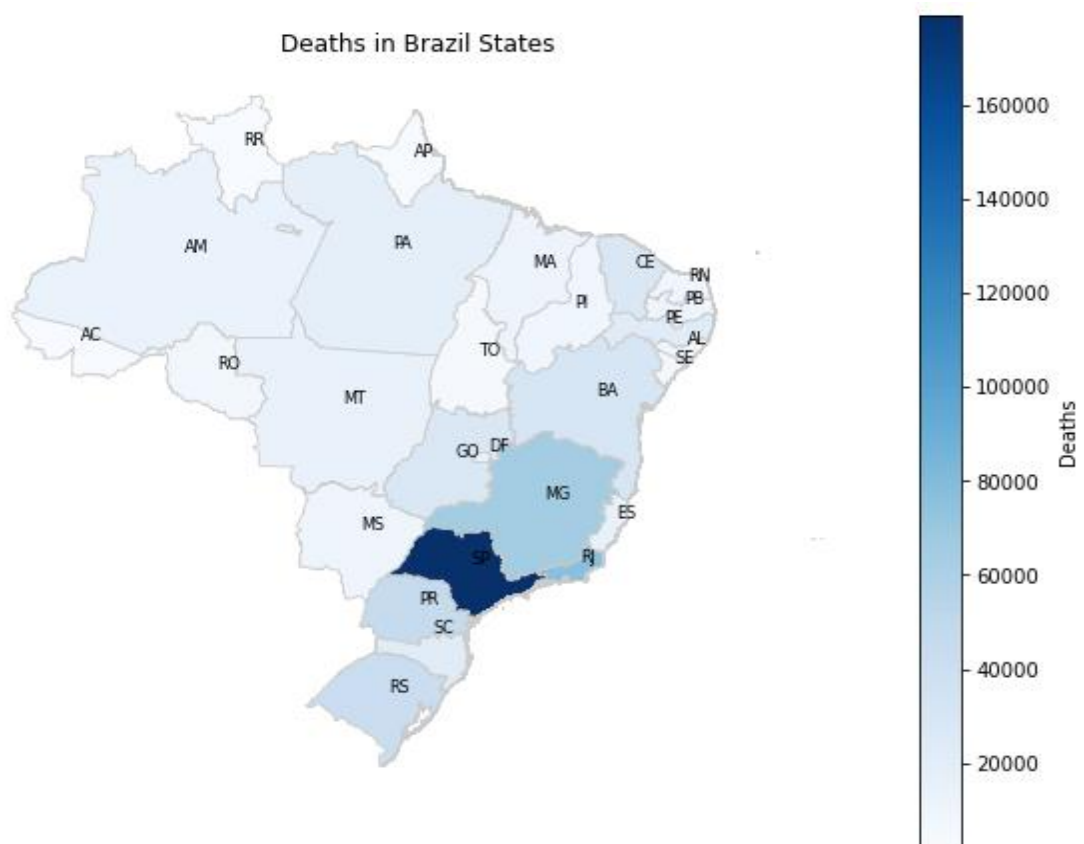# Brazil's Map of the number of deaths by state

Fig. 3 - Brazil's Map of the number of deaths by state. The scale in blue color indicates the intensity, with the lightest tone being the least intense and the darkest tone being the most intense.

We can see according to the graphs in figure 1 and 2 above that the region with the highest number of deaths was the southeast region, with São Paulo being the state with the highest number of deaths.

Pie chart of the number of deaths by region in Brazil per 100 thousand inhabitants

Distribution of Deaths per 100k Inhabitants by Region

Região Sul — 25.2%
Região Centro-Oeste — 10.8%
Região Nordeste — 22.1%
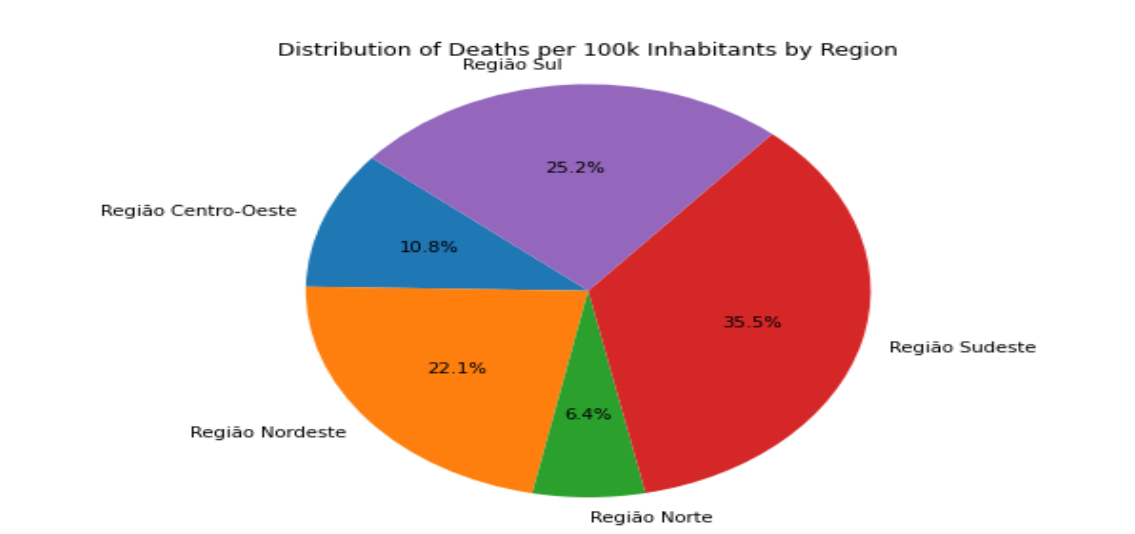Região Norte — 6.4%
Região Sudeste — 35.5%

Fig. 4 - Graph of the number of deaths by state in Brazil per 100 thousand inhabitants

Graph of the number of deaths by state in Brazil per 100 thousand inhabitants
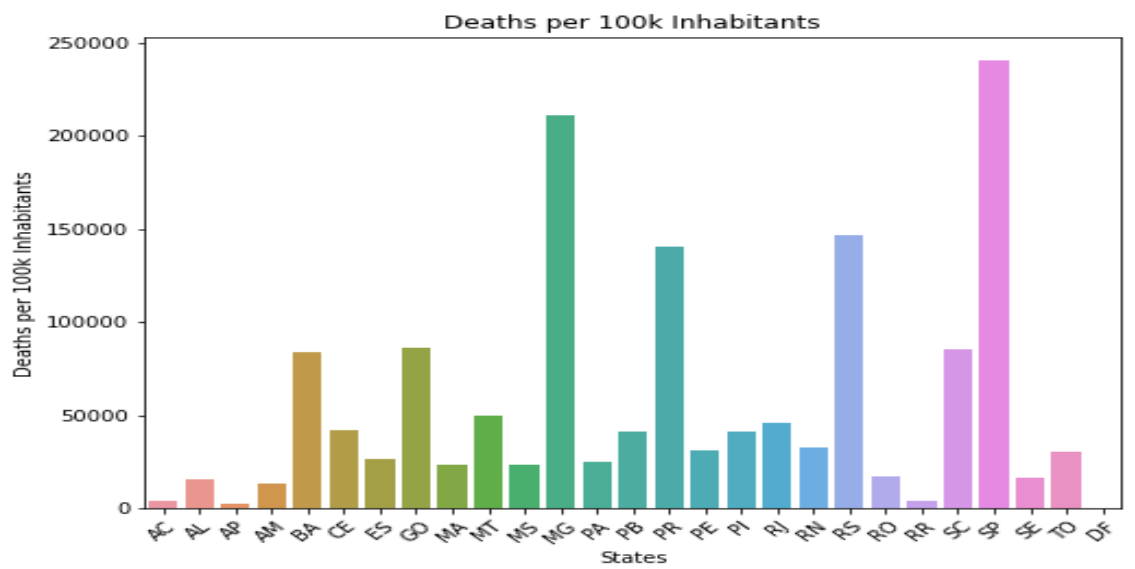
Deaths per 100k Inhabitants

Fig. 5 - Graph of the number of deaths by state in Brazil per 100 thousand inhabitants

Brazil's Map of the number of deaths by state per 100 thousand inhabitants

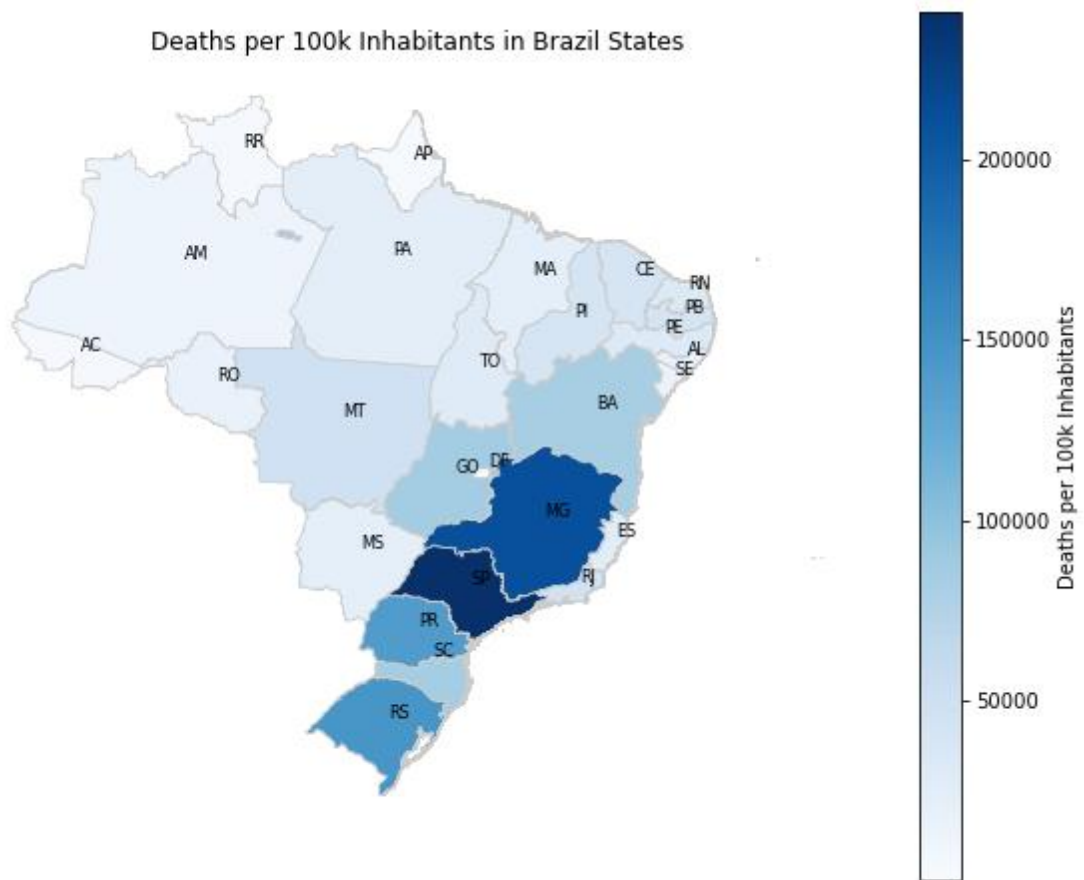
Deaths per 100k Inhabitants in Brazil States

Fig. 6 - Graph of the number of deaths by state in Brazil per 100 thousand inhabitants. The scale in blue color indicates the intensity, with the lightest tone being the least intense and the darkest tone being the most intense.

However, when we look at the sample of 100,000 inhabitants, according to the graphs in figures 3 and 4, we see that the percentage of the south and northeast regions increases in relation to the total, showing that these regions were also greatly affected by covid-19.

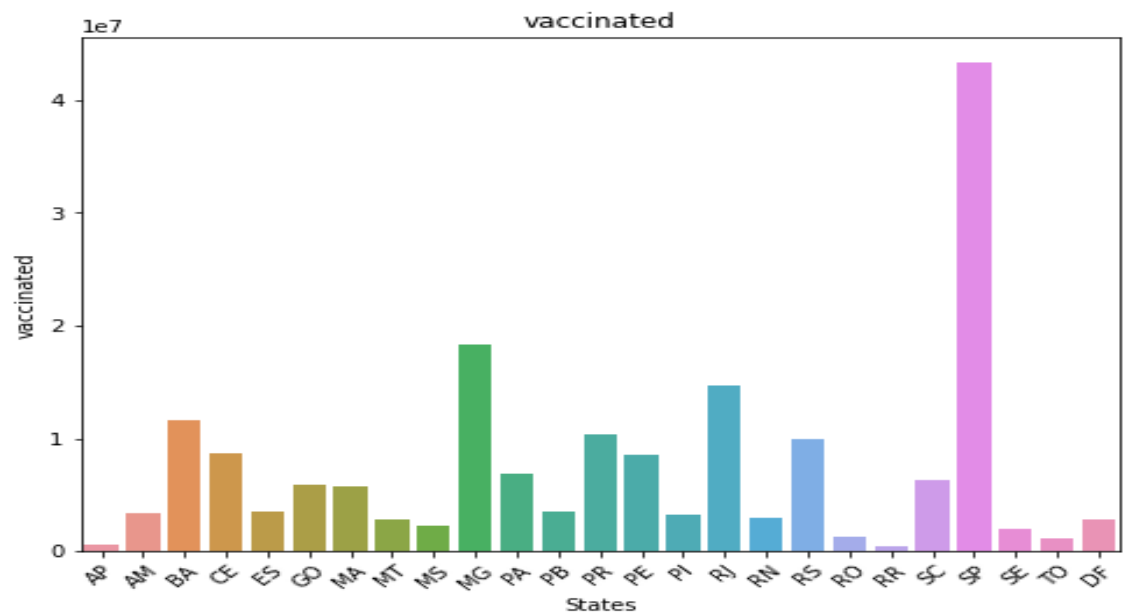**Graph of the number of vaccinated by state in Brazil**

Fig. 7 - Graph of the number of vaccinated by state in Brazil

As we can see, according to the graph in figure 7, the most affected states were also the ones that vaccinated the most.
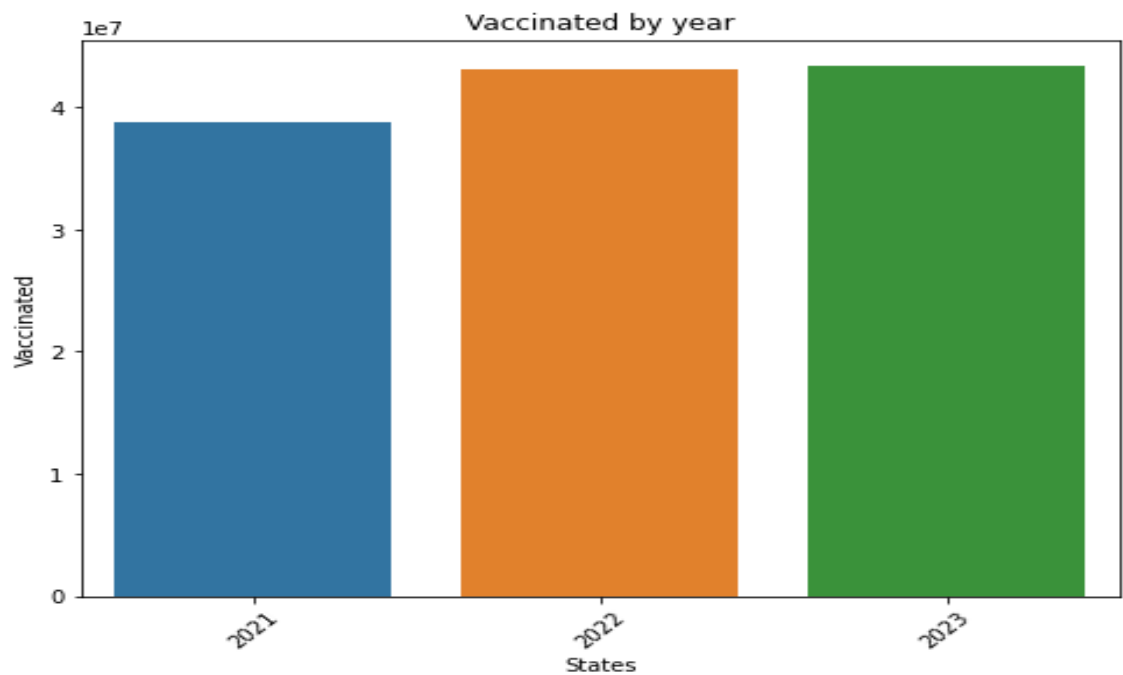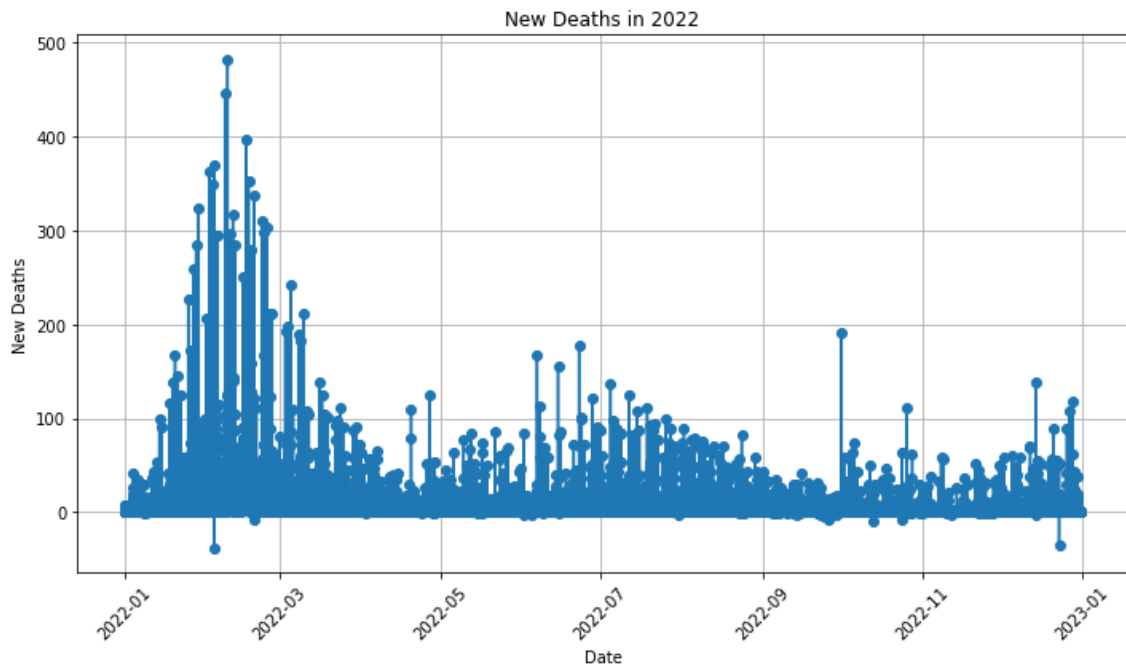
Graph of the number of vaccinated by year

Fig. 8 - Graph of the number of vaccinated by state in Brazil

Graph of the number of new deaths in 2022

Despite most of the population being vaccinated, we still had a significant number of deaths from covid-19 in 2022. According to available data, the percentage of the adult vaccinable population is 78.72%.

Conclusion

Brazil faced a significant impact from COVID-19, becoming one of the hardest-hit countries. The virus spread rapidly across its vast population, overwhelming healthcare systems in many regions. The government implemented a range of responses, including lockdowns and social distancing measures. The percentage of people vaccinated in Brazil is a very relevant number.