How Covid-19's Progression Differed Across Continents

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Abstract

The Covid-19 pandemic had devastating effects across the globe. Were some regions affected significantly differently than other? This question is evaluated by analysing Covid-19 specific data for each continent.

Keywords: Covid-19, Regions, Data Analysis

Introduction

The Covid-19 pandemic has wreaked havoc on many facets of our lives, and continue to affect travel, work and how people socially interact. This report includes some graphs and figures on the evolution of the breakout. Specifically, it provides comparisons on how continents differ.

Data

The data used was sourced from 'Our World In Data.' The dataset is very broad and many more figures and statistics could have been created than what is presented here. This report focuses on the total cases and deaths recorded for each continent so that we can compare the progression of the pandemic in different regions. The region of Antarctica is excluded from the analysis due to lack of data.

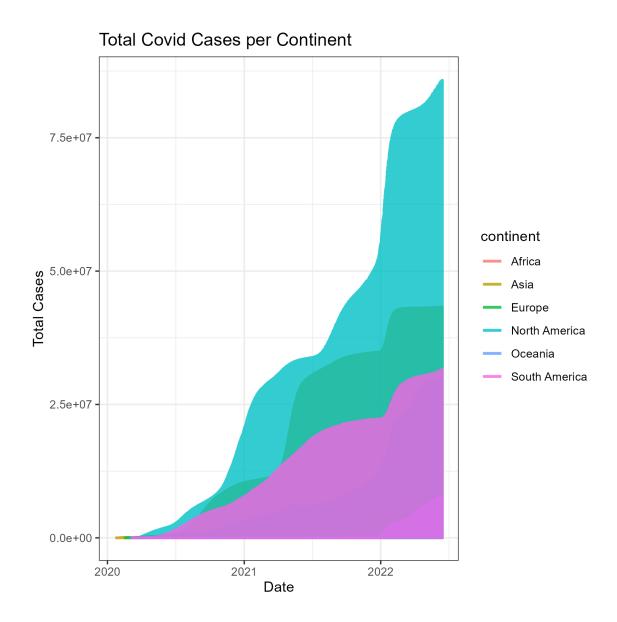
Results

Let's consider the cumulative Covid-19 cases for each continent:

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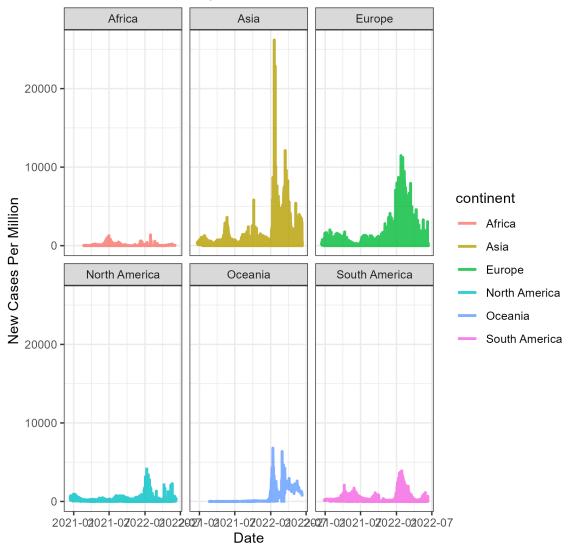
Contributions:

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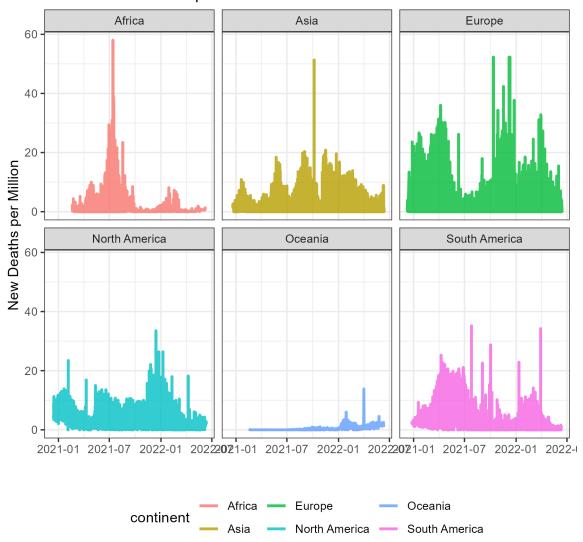
While the continents cannot be distinguished clearly, the rate of infection is visualised and we can see when continents were able to "flatten the curve", or more prominently, when they were not able to do so. Notably, the rate of infection is rather high during the second half of the pandemic, likely due to the spread of the more infectious, but less deadly, Omicron variant.





The above figure shows only the newly recorded Covid-19 cases (i.e. we do no longer see the rate of infections but rather the number of infections). Asia and Europe record more cases of Covid-19, which could be due to dense populations or a higher frequency of testing, or likely a combination of both. The suspicion that other regions had fewer cases is squashed when we look at the number of deaths in the figure below.

New Covid Deaths per Continent



It becomes clear that more people passed from Covid-19 than were tested for Covid-19, in all the continents except for Oceania (that had implemented extreme lockdown and testing measures). Lack of testing could be due to having a limited number of tests available and/or a limited capacity of laboratories to process tests, particularly in Africa and South America, where deaths are significantly higher than reported cases.

Conclusion

Oceania implemented extremely strict prevention measures, which were successful in curbing the spread of Covid-19, as well as preventing Covid-19 deaths. With the exception of Oceania, every

continent had significant numbers of deaths due to Covid-19, and no continent seemed to stand out in severity among the rest. The analysis did however make it clear that there was a lack of testing, since the death toll far outweighed the number of reported cases, for all continents except Oceania.