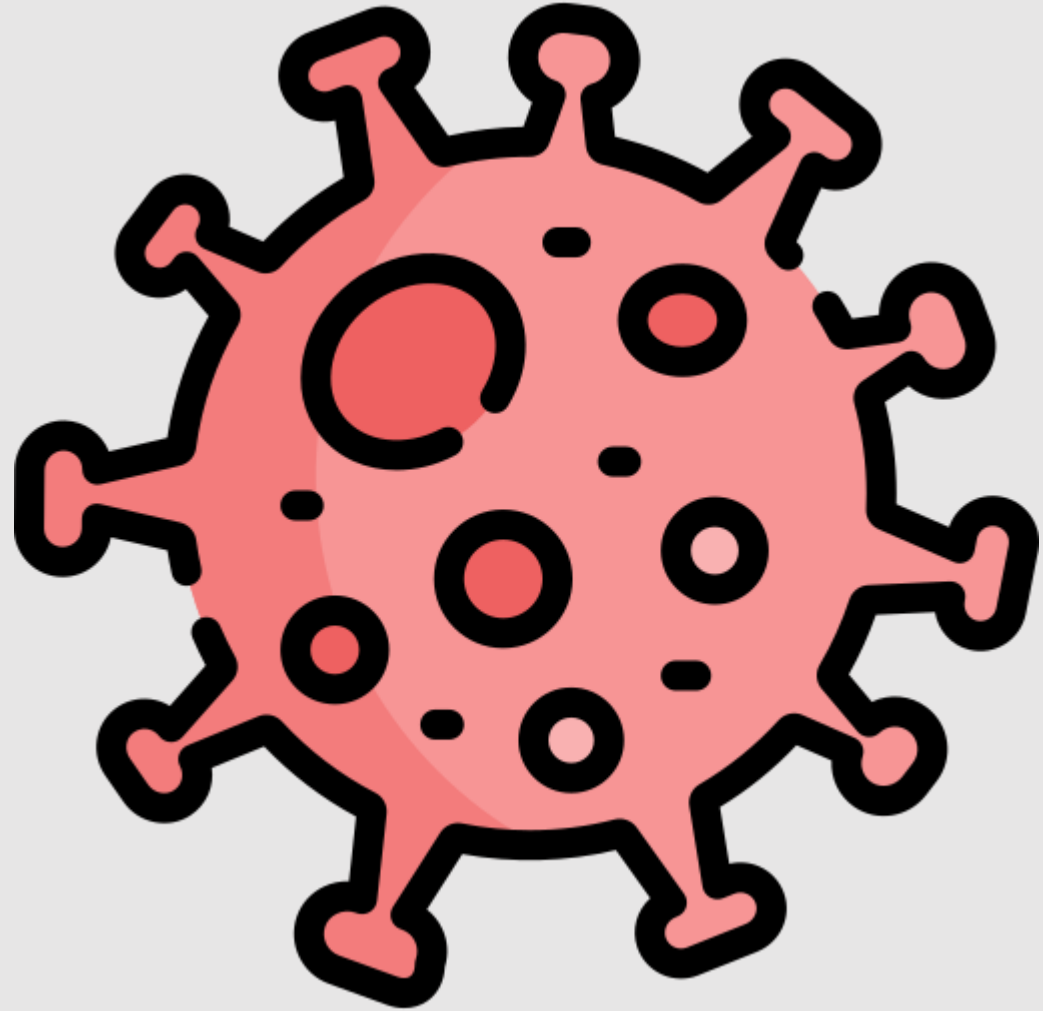


Exploratory Analysis of Global Covid-19 Data

NAME:- Christopher Emmanuel I

Last updated 29th September 2022



Introduction

COVID-19:- A highly contagious respiratory disease caused by the SARS-CoV-2 virus. SARS-CoV-2 is thought to spread from person to person through droplets released when an infected person cough, sneezes, or talks. It may be spread by touching a surface with the virus on it and then touching one mouth, nose, or eyes.

This project provide a summary on covid-19 cases reported globally relating to confirmed cases, death cases and dates rate across regions/provinces.

Objective

To identify the distribution of covid cases, death and recovery across the globe, and top 5 countries with the highest number of cases and deaths within the period of 3 years.

Data Source

The data used for this project was extracted from

https://github.com/CSSEGISandData/COVID-19/tree/master/csse_covid_19_data/csse_covid_19_time_series Saved In CSV format.

The data is a time series data that is regularly updated

The source of the data is John Hopkin University, USA

The dataset used contains confirmed cases, death and recovery from countries from 2020-2022

Datasets view

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW DEVELOPER FOXIT READER PDF POW						
E12	2/1/20					
	A	B	C	D	E	F
1	Province/State	Country/Region	Lat	Long	Date	Confirmed
2		Afghanistan	33.93911	67.709953	1/22/20	0
3		Afghanistan	33.93911	67.709953	1/23/20	0
4		Afghanistan	33.93911	67.709953	1/24/20	0
5		Afghanistan	33.93911	67.709953	1/25/20	0
6		Afghanistan	33.93911	67.709953	1/26/20	0
7		Afghanistan	33.93911	67.709953	1/27/20	0
8		Afghanistan	33.93911	67.709953	1/28/20	0
9		Afghanistan	33.93911	67.709953	1/29/20	0
10		Afghanistan	33.93911	67.709953	1/30/20	0
11		Afghanistan	33.93911	67.709953	1/31/20	0
12		Afghanistan	33.93911	67.709953	2/1/20	0
13		Afghanistan	33.93911	67.709953	2/2/20	0
14		Afghanistan	33.93911	67.709953	2/3/20	0
15		Afghanistan	33.93911	67.709953	2/4/20	0
16		Afghanistan	33.93911	67.709953	2/5/20	0
17		Afghanistan	33.93911	67.709953	2/6/20	0
18		Afghanistan	33.93911	67.709953	2/7/20	0
19		Afghanistan	33.93911	67.709953	2/8/20	0
20		Afghanistan	33.93911	67.709953	2/9/20	0
21		Afghanistan	33.93911	67.709953	2/10/20	0
22		Afghanistan	33.93911	67.709953	2/11/20	0
23		Afghanistan	33.93911	67.709953	2/12/20	0
24		Afghanistan	33.93911	67.709953	2/13/20	0
25		Afghanistan	33.93911	67.709953	2/14/20	0
26		Afghanistan	33.93911	67.709953	2/15/20	0
27		Afghanistan	33.93911	67.709953	2/16/20	0
28		Afghanistan	33.93911	67.709953	2/17/20	0
29		Afghanistan	33.93911	67.709953	2/18/20	0
30		Afghanistan	33.93911	67.709953	2/19/20	0
31		Afghanistan	33.93911	67.709953	2/20/20	0
32		Afghanistan	33.93911	67.709953	2/21/20	0
33		Afghanistan	33.93911	67.709953	2/22/20	0
34		Afghanistan	33.93911	67.709953	2/23/20	0
35		Afghanistan	33.93911	67.709953	2/24/20	0
36		Afghanistan	33.93911	67.709953	2/25/20	0
37		Afghanistan	33.93911	67.709953	2/26/20	0
38		Afghanistan	33.93911	67.709953	2/27/20	0
39		Afghanistan	33.93911	67.709953	2/28/20	0
40		Afghanistan	33.93911	67.709953	2/29/20	0
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52		Afghanistan	33.93911	67.709953	3/11/20	0
53		Afghanistan	33.93911	67.709953	3/12/20	0
54		Afghanistan	33.93911	67.709953	3/13/20	0
55		Afghanistan	33.93911	67.709953	3/14/20	0
56		Afghanistan	33.93911	67.709953	3/15/20	0
57		Afghanistan	33.93911	67.709953	3/16/20	0
58		Afghanistan	33.93911	67.709953	3/17/20	0
59		Afghanistan	33.93911	67.709953	3/18/20	0
60		Afghanistan	33.93911	67.709953	3/19/20	0
61		Afghanistan	33.93911	67.709953	3/20/20	0
62		Afghanistan	33.93911	67.709953	3/21/20	0
63		Afghanistan	33.93911	67.709953	3/22/20	0
64		Afghanistan	33.93911	67.709953	3/23/20	0
65		Afghanistan	33.93911	67.709953	3/24/20	0
66		Afghanistan	33.93911	67.709953	3/25/20	0
67		Afghanistan	33.93911	67.709953	3/26/20	0
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69		Afghanistan	33.93911	67.709953	3/28/20	0
70		Afghanistan	33.93911	67.709953	3/29/20	0
71		Afghanistan	33.93911	67.709953	3/30/20	0
72		Afghanistan	33.93911	67.709953	3/31/20	0
73		Afghanistan	33.93911	67.709953	4/1/20	0
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75		Afghanistan	33.93911	67.709953	4/3/20	0
76		Afghanistan	33.93911	67.709953	4/4/20	0
77		Afghanistan	33.93911	67.709953	4/5/20	0
78		Afghanistan	33.93911	67.709953	4/6/20	0
79		Afghanistan	33.93911	67.709953	4/7/20	0
80		Afghanistan	33.93911	67.709953	4/8/20	0
81		Afghanistan	33.93911	67.709953	4/9/20	0
82		Afghanistan	33.93911	67.709953	4/10/20	0
83		Afghanistan	33.93911	67.709953	4/11/20	0
84		Afghanistan	33.93911	67.709953	4/12/20	0
85		Afghanistan	33.93911	67.709953	4/13/20	0
86		Afghanistan	33.93911	67.709953	4/14/20	0
87		Afghanistan	33.93911	67.709953	4/15/20	0
88		Afghanistan	33.93911	67.709953	4/16/20	0
89		Afghanistan	33.93911	67.709953	4/17/20	0
90		Afghanistan	33.93911	67.709953	4/18/20	0
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93		Afghanistan	33.93911	67.709953	4/21/20	0
94		Afghanistan	33.93911	67.709953	4/22/20	0
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96		Afghanistan	33.93911	67.709953	4/24/20	0
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98		Afghanistan	33.93911	67.709953	4/26/20	0
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101		Afghanistan	33.93911	67.709953	4/29/20	0
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103		Afghanistan	33.93911	67.709953	5/1/20	0
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105		Afghanistan	33.93911	67.709953	5/3/20	0
106		Afghanistan	33.93911	67.709953	5/4/20	0
107		Afghanistan	33.93911	67.709953	5/5/20	0
108		Afghanistan	33.93911	67.709953	5/6/20	0
109		Afghanistan	33.93911	67.709953	5/7/20	0
110		Afghanistan	33.93911	67.709953	5/8/20	0
111		Afghanistan	33.93911	67.709953	5/9/20	0
112		Afghanistan	33.93911	67.709953	5/10/20	0
113		Afghanistan	33.93911	67.709953	5/11/20	0
114		Afghanistan	33.93911	67.709953	5/12/20	0
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116		Afghanistan	33.93911	67.709953	5/14/20	0
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118		Afghanistan	33.93911	67.709953	5/16/20	0
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121		Afghanistan	33.93911	67.709953	5/19/20	0
122		Afghanistan	33.93911	67.709953	5/20/20	0
123		Afghanistan	33.93911	67.709953	5/21/20	0
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130		Afghanistan	33.93911	67.709953	5/28/20	0
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136		Afghanistan	33.93911	67.709953	6/3/20	0
137		Afghanistan	33.93911	67.709953	6/4/20	0
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139		Afghanistan	33.93911	67.709953	6/6/20	0
140		Afghanistan	33.93911	67.709953	6/7/20	0
141		Afghanistan	33.93911	67.709953	6/8/20	0
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143		Afghanistan	33.93911	67.709953	6/10/20	0
144		Afghanistan	33.93911	67.709953	6/11/20	0
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148		Afghanistan	33.93911	67.709953	6/15/20	0
149		Afghanistan	33.93911	67.709953	6/16/20	0
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161		Afghanistan	33.93911	67.709953	6/28/20	0
162		Afghanistan	33.93911	67.709953	6/29/20	0
163		Afghanistan	33.93911	67.709953	6/30/20	0
164		Afghanistan	33.93911	67.709953	7/1/20	0
165		Afghanistan	33.93911	67.709953	7/2/20	0
166		Afghanistan	33.93911	67.709953	7/3/20	0
167		Afghanistan	33.93911	67.709953	7/4/20	

Methodology

The software tools used are:

- Microsoft Excel:- The analysis was carried out using Microsoft Excel
- power query:- The raw datasets were cleaned and merged using Power query
- Pivot tables were used to perform calculations
- PivotCharts were used to visualize insights

Data View

Queries [4]

Confirmed

Death

Recovered

CoVidData

= Table.RenameColumns("#Expanded Recovered",{{"Recovered.Recovered","Recovered"}})

	A ^B C Province/State	A ^B C Country/Region	1.2 Lat	1.2 Long	A ^B C Date	ABC 123 Confirmed	ABC 123 Death	ABC 123 Recovered
1		Afghanistan	33.93911	67.709953	1/22/20	0	0	
2		Afghanistan	33.93911	67.709953	1/23/20	0	0	
3		Afghanistan	33.93911	67.709953	1/24/20	0	0	
4		Afghanistan	33.93911	67.709953	1/25/20	0	0	
5		Afghanistan	33.93911	67.709953	1/26/20	0	0	
6		Afghanistan	33.93911	67.709953	1/27/20	0	0	
7		Afghanistan	33.93911	67.709953	1/28/20	0	0	
8		Afghanistan	33.93911	67.709953	1/29/20	0	0	
9		Afghanistan	33.93911	67.709953	1/30/20	0	0	
10		Afghanistan	33.93911	67.709953	1/31/20	0	0	
11		Afghanistan	33.93911	67.709953	2/1/20	0	0	
12		Afghanistan	33.93911	67.709953	2/2/20	0	0	
13		Afghanistan	33.93911	67.709953	2/3/20	0	0	
14		Afghanistan	33.93911	67.709953	2/4/20	0	0	
15		Afghanistan	33.93911	67.709953	2/5/20	0	0	
16		Afghanistan	33.93911	67.709953	2/6/20	0	0	
17		Afghanistan	33.93911	67.709953	2/7/20	0	0	
18		Afghanistan	33.93911	67.709953	2/8/20	0	0	
19		Afghanistan	33.93911	67.709953	2/9/20	0	0	
20		Afghanistan	33.93911	67.709953	2/10/20	0	0	
21		Afghanistan	33.93911	67.709953	2/11/20	0	0	
22		Afghanistan	33.93911	67.709953	2/12/20	0	0	
23		Afghanistan	33.93911	67.709953	2/13/20	0	0	
24		Afghanistan	33.93911	67.709953	2/14/20	0	0	
25		Afghanistan	33.93911	67.709953	2/15/20	0	0	
26								

Query Settings

PROPERTIES

Name

CoVidData

All Properties

APPLIED STEPS

Source ✖

Expanded Death ✖

Renamed Columns ✖

Merged Queries ✖

Expanded Recovered ✖

X Renamed Columns1

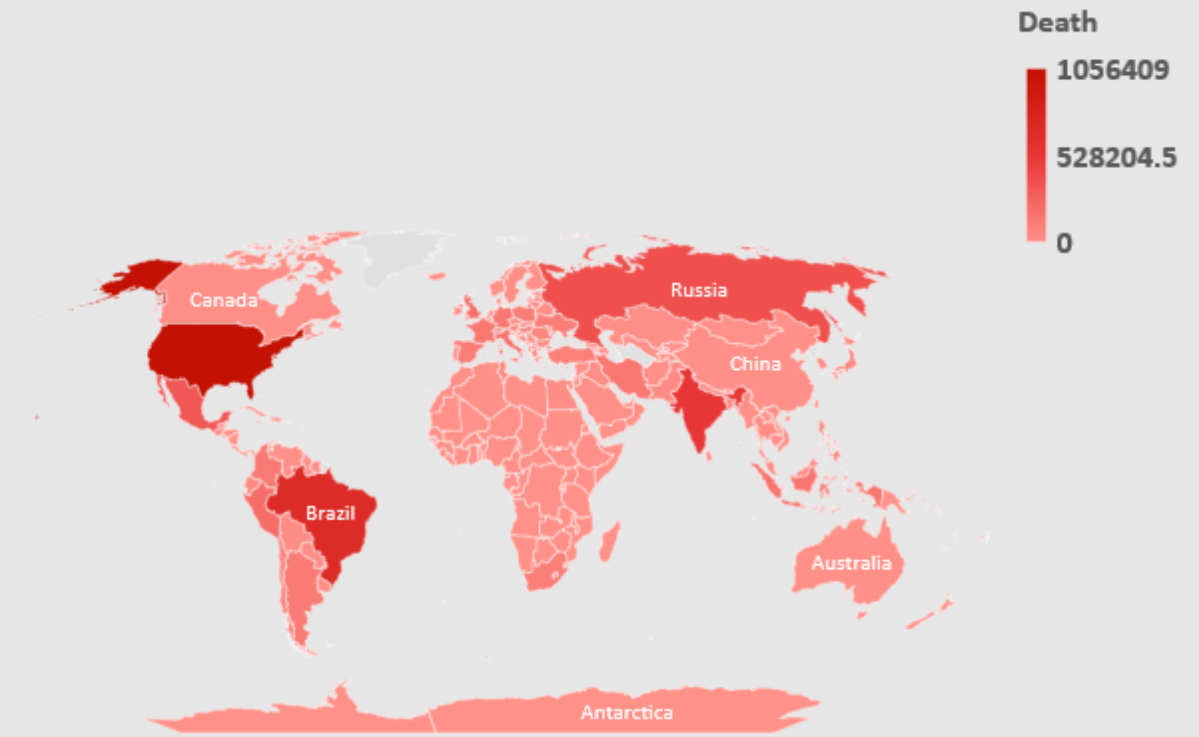
Confirmed cases

- North America, South America, Europe and Asia have high number of confirmed cases.
- Africa has a low number of confirmed cases compared to other continents.
- The total number of cases as at the time the analysis was made is **602,796,643**



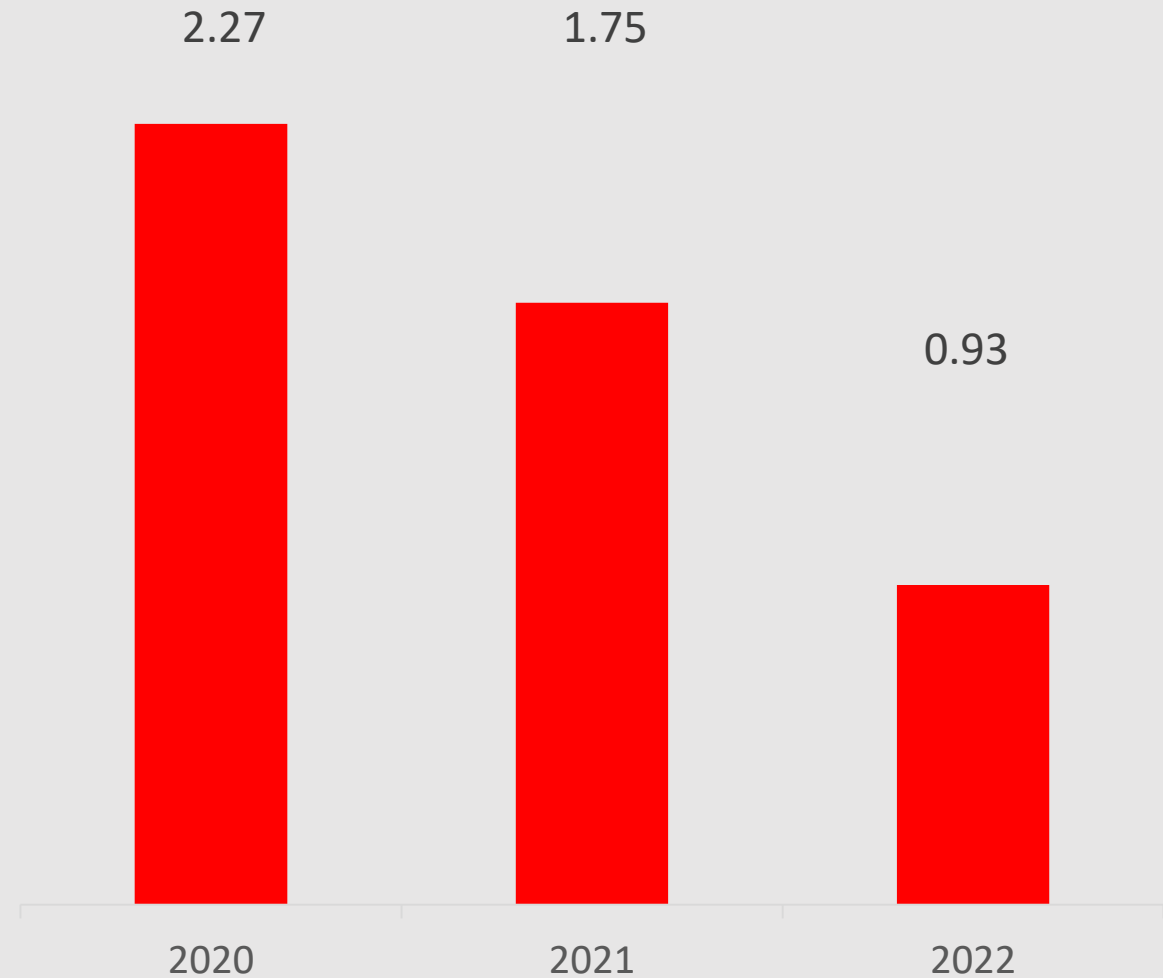
Death

- North America, South America, Europe and Asia have high number of confirmed cases.
- Africa has a low number of deaths compared to other continents.
- The total number of cases as at the time the analysis was made is **8,380,737**



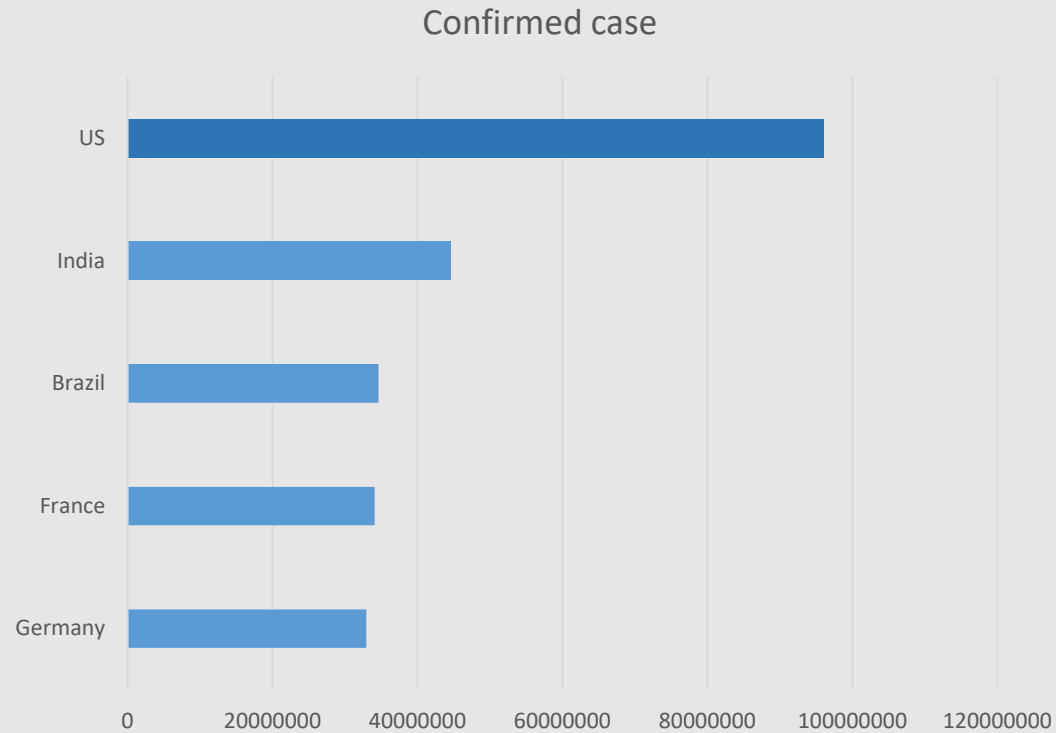
Death rate

- While the number of death cases increased from 2020-2021, there was a decrease in the death rate from 2.27% to 1.75.
- The decline continued in 2022, dropping to 0.93
- The increased vaccination drive could be a drive for this however, there is not enough data to back the claim.

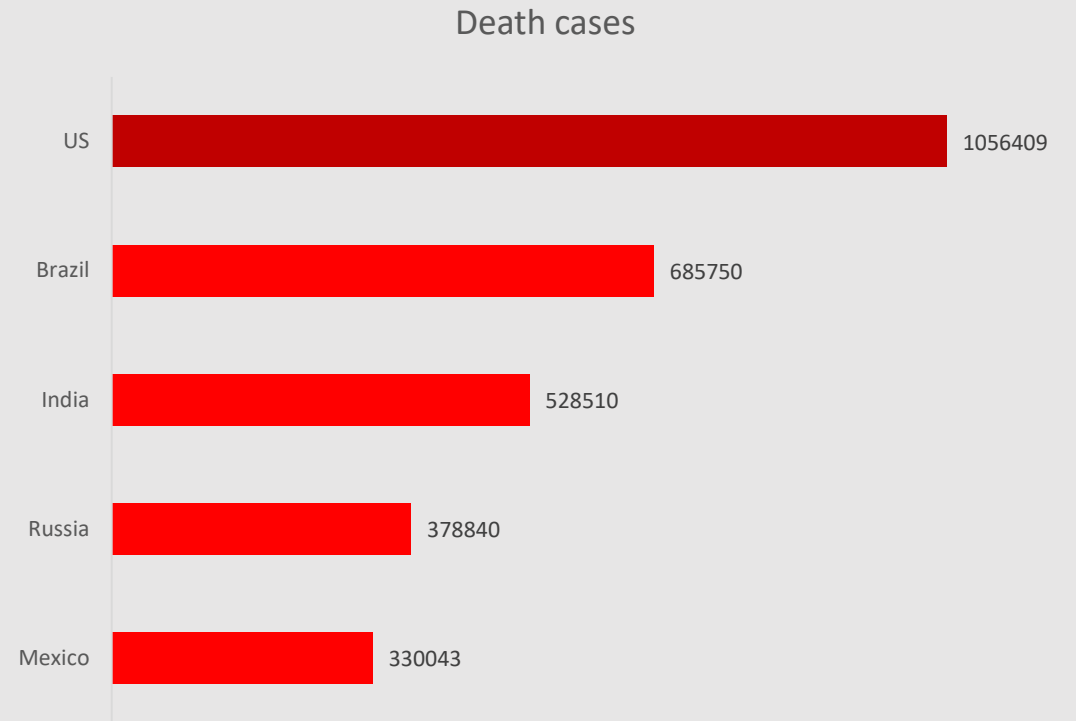


Charts View

Confirmed cases by countries



Deaths cases by Countries



Charts view

Chart view of confirmed cases by year

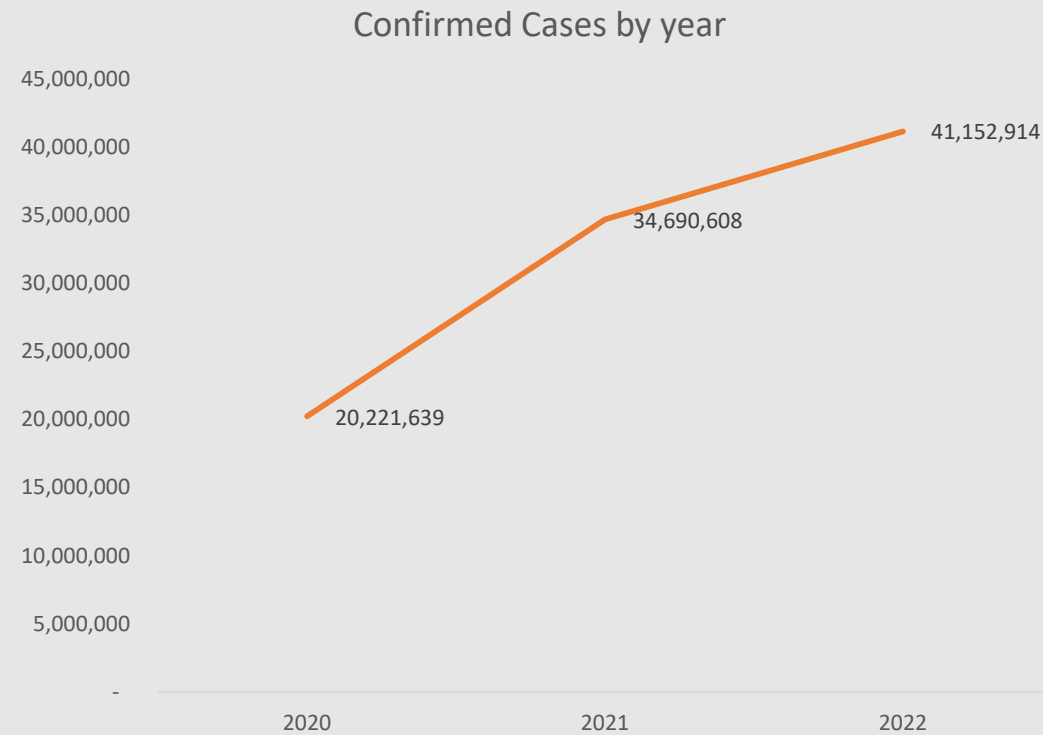
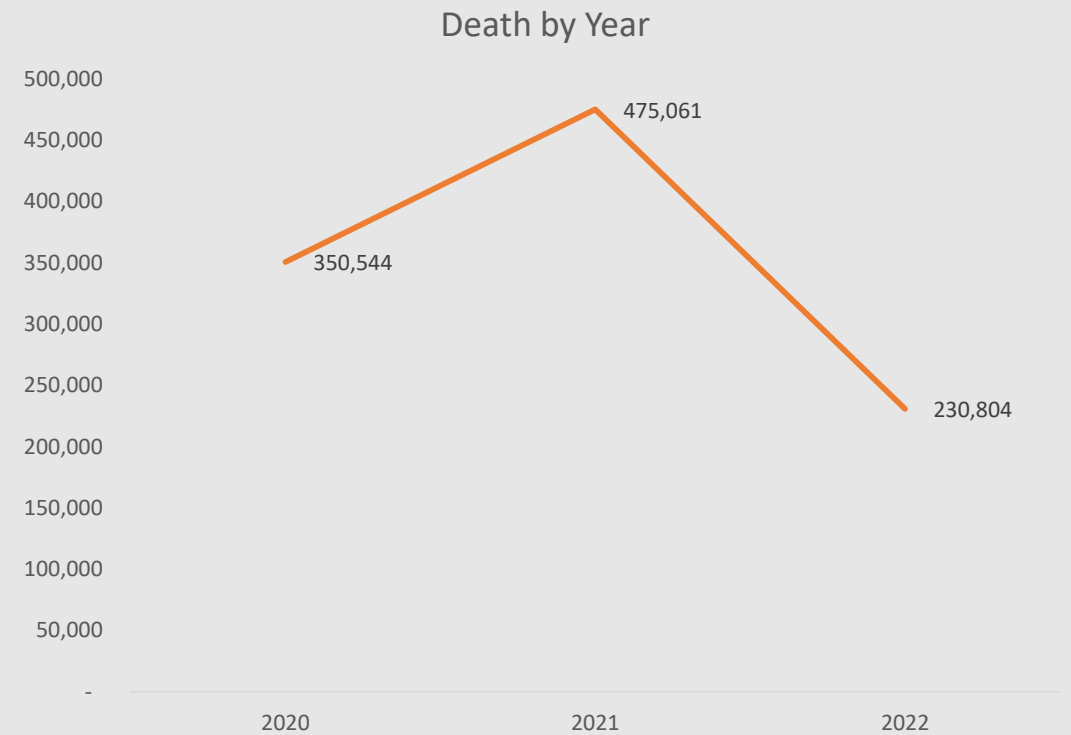


Chart view of death cases by year



DASHBOARD



COVID-19 DASHBOARD

By Chris Emmanuel

Dated 29/09/2022

CONFIRMED CASES



613,942,561



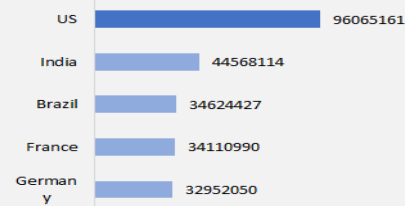
DEATH

6,520,263

DEATH RATES

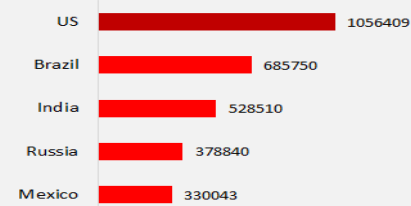
1.10%

Top 5 countries with the highest number of confirmed cases



The **US** has the highest number of cases, with a total of **96M** followed by **India**

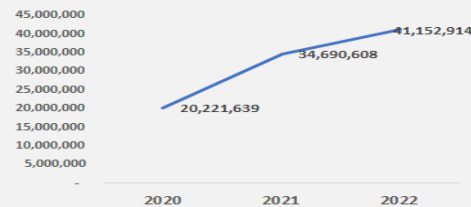
Top 5 countries with the highest number of deaths



The **US** has the highest number of deaths, with a total of **1.05M** followed by **Brazil**

Top 5 countries with the highest number of confirmed cases

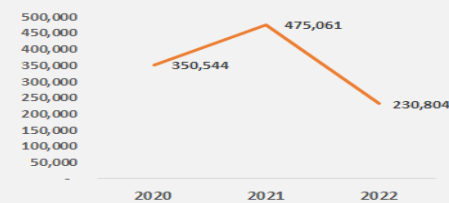
Confirmed Cases by year



2022 has highest number of confirmed cases with a total of **41.1M** while **2020** has the lowest confirmed cases with **20M**.

Top 5 countries with the highest number of confirmed cases

Death by Year



2021 has highest number of deaths with a total of **475,061** while **2022** has the lowest confirmed cases with **230,804**.

COVID-19 data are reported as timely, accurately and completely as we have available. Data are updated as we receive information that is more complete and will change over time as we learn more.

It is evident from the analysis that Covid-19 is still in our world as the number of cases keep increasing

Everyone should keep observing Covid-19 precautionary measures

There should be continuous vaccination to protect people from been infected with the virus