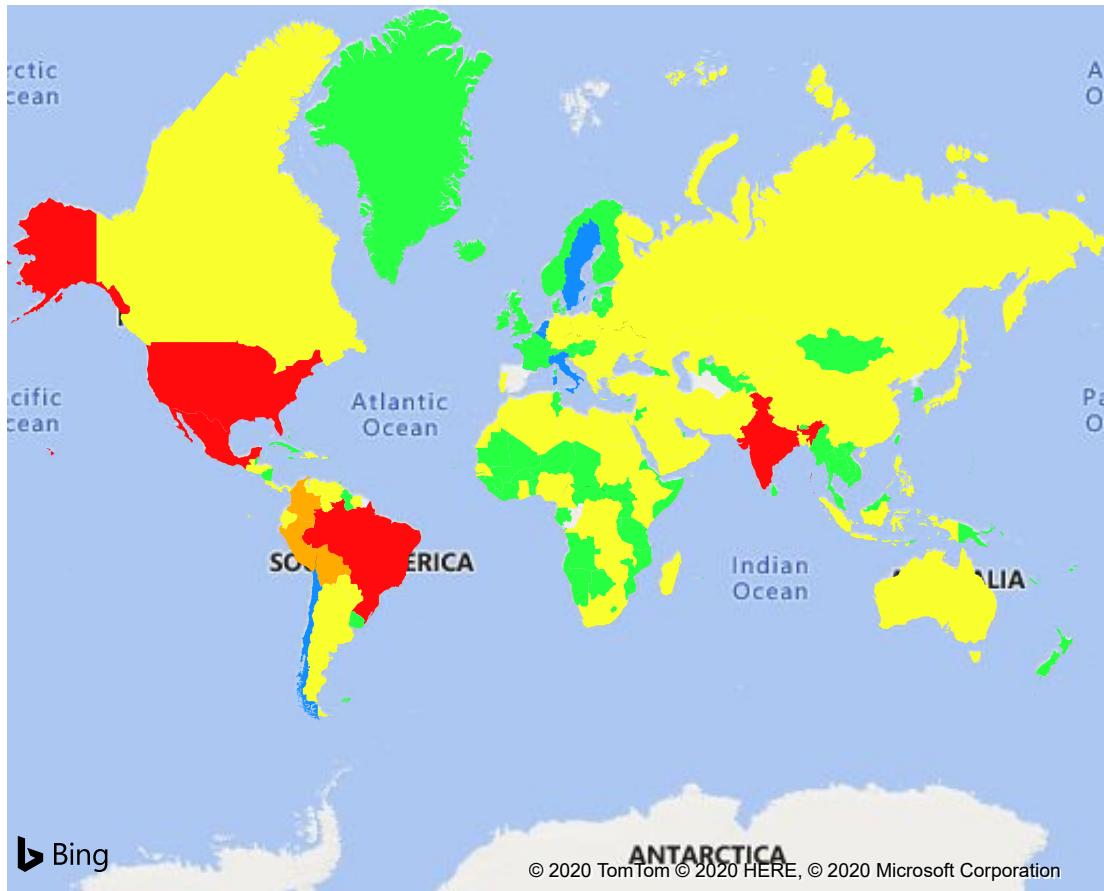


COVID - 19 Dashboard

Clusters ● Big Players ● Others ● Potential Players ● Substitute ● Veterans



Big Players

Consistent deaths with high volume and density

Potential Players

Consistent deaths with high density

Veterans

Deaths significantly decreased

Substitute

Consistent deaths with low volume or density

Others

Non-significant or no deaths reported recently

Countries	new_cases_7days_simple moving_average	new_deaths_7days_simple moving_average
India	62,009.57	934.29
United States	49,133.00	1,005.14
Brazil	43,157.14	969.14
Colombia	11,291.00	316.86
Peru	8,337.14	743.57
Argentina	6,867.14	159.43
Mexico	5,699.57	574.29
Russia	5,013.00	97.00
Philippines	3,976.57	55.43
Iraq	3,790.57	70.00
South Africa	3,755.43	194.43
Bangladesh	2,662.43	36.57
Iran	2,372.29	169.71
France	2,322.00	12.71
Indonesia	2,041.00	63.14
Chile	1,779.71	53.43
Ukraine	1,617.29	23.57
Saudi Arabia	1,423.86	33.86
Israel	1,415.29	11.29
Bolivia	1,369.71	58.71
Morocco	1,356.43	20.29
Venezuela	1,285.29	9.29
Romania	1,235.29	42.86
Turkey	1,220.71	19.71
Kazakhstan	1,210.29	28.86

Countries	total_cases_rank	total_cases_count	Countries	total_deaths_rank	total_deaths_count
United States	1	5438325	United States	1	170497
Brazil	2	3359570	Brazil	2	108536
India	3	2702742	Mexico	3	57023
Russia	4	927745	India	4	51797
South Africa	5	589886	United Kingdom	5	41369

Last updated on : 18-Aug-2020

Cluster Map: The aim is to segregate countries with similar traits and assign them into clusters. Here, we grouped the countries based on the population and density (per million) regarding COVID-19 deaths. Also, considered their present and past status.

There are five following clusters.

- Big Players: Consistent deaths with higher volume and density
- Potential Players: Consistent deaths with higher density
- Veterans: Deaths significantly decreased
- Substitute: Consistent deaths with low volume or density
- Others: Non-significant or no deaths reported recently

Ranking Method: Countries ranked based on the total cases (or deaths) in descending order

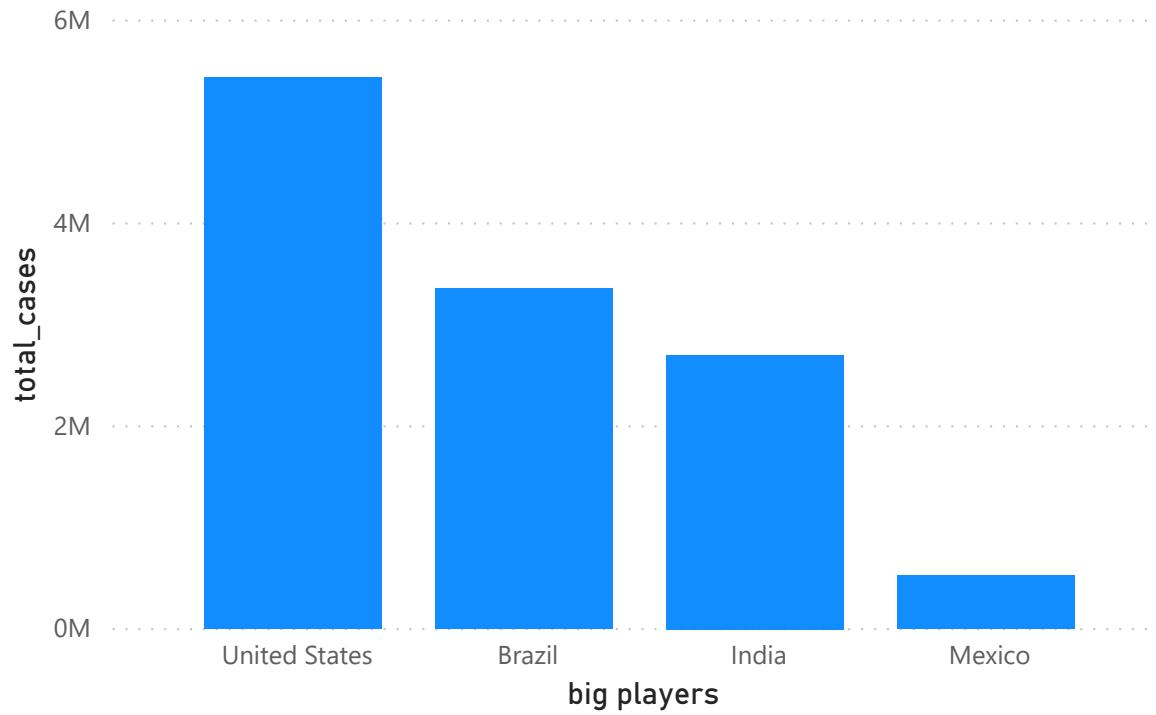
- Countries ranked based on the total cases (Bottom left table)
- Countries ranked based on the total deaths (Bottom middle table)

Simple Moving Average (SMA): It is a calculation that takes the arithmetic mean of a given set of data points over the specific number of days in the past. Here, we considered 7 days rolling mean. 7-day SMA calculated for COVID-19 cases and deaths (top right table).

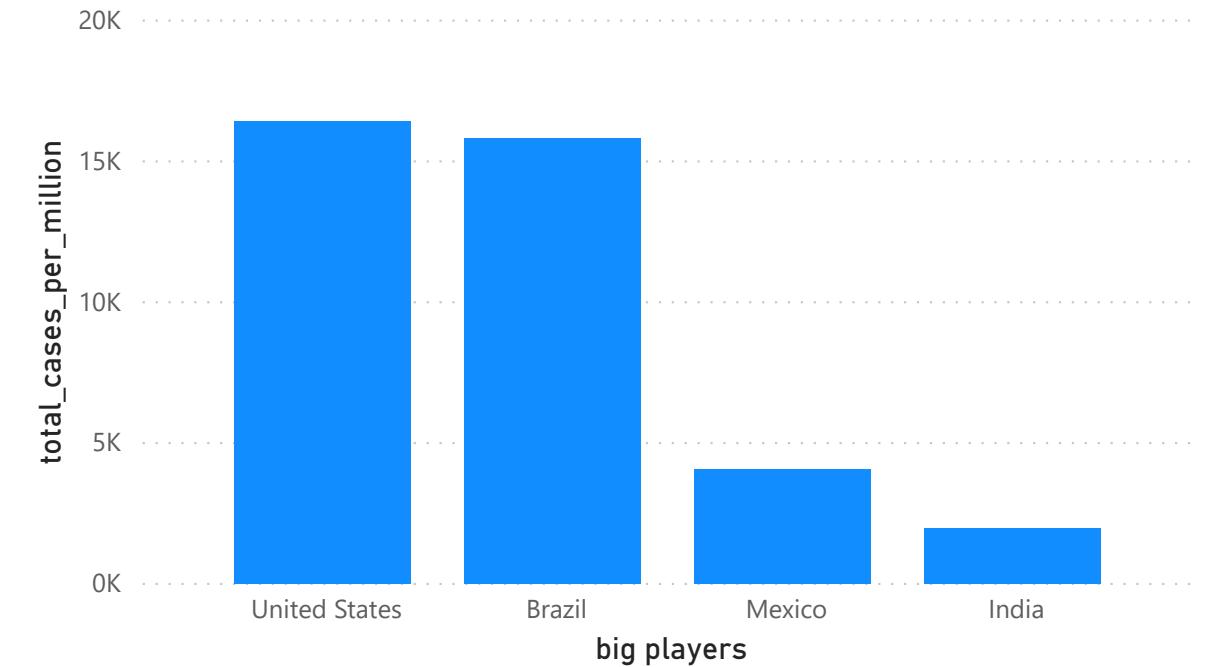
Data last updated on 18-Aug-2020. If you want to look at the previous status for all the above figures (or map) based on a date, there is a filter option available in the Power BI dashboard (not visible in the picture but available in the Power BI file).

COVID - 19 Dashboard

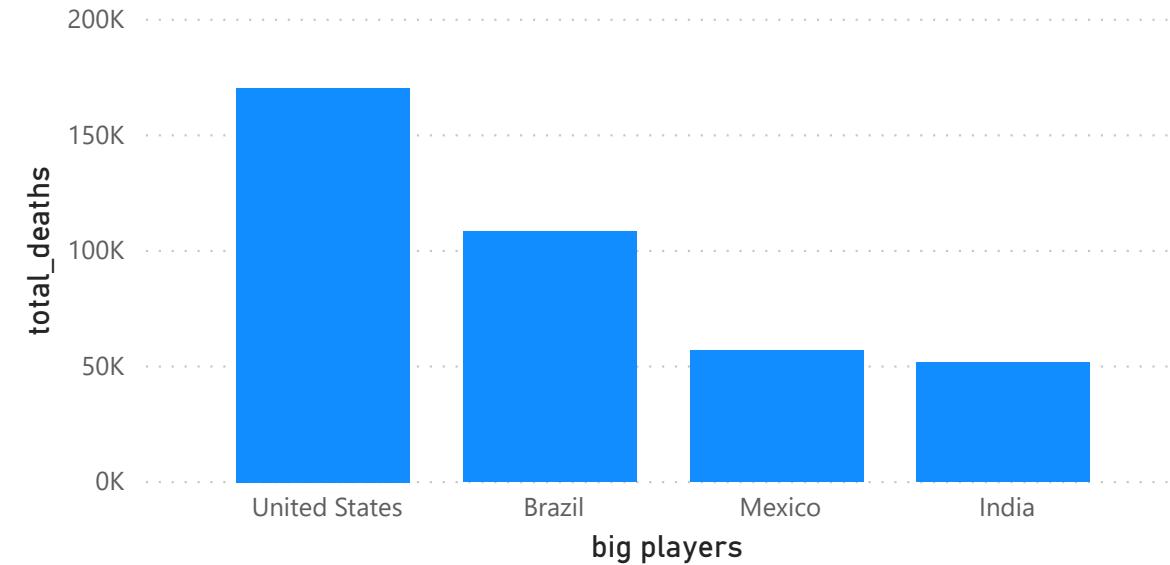
total_cases by big players



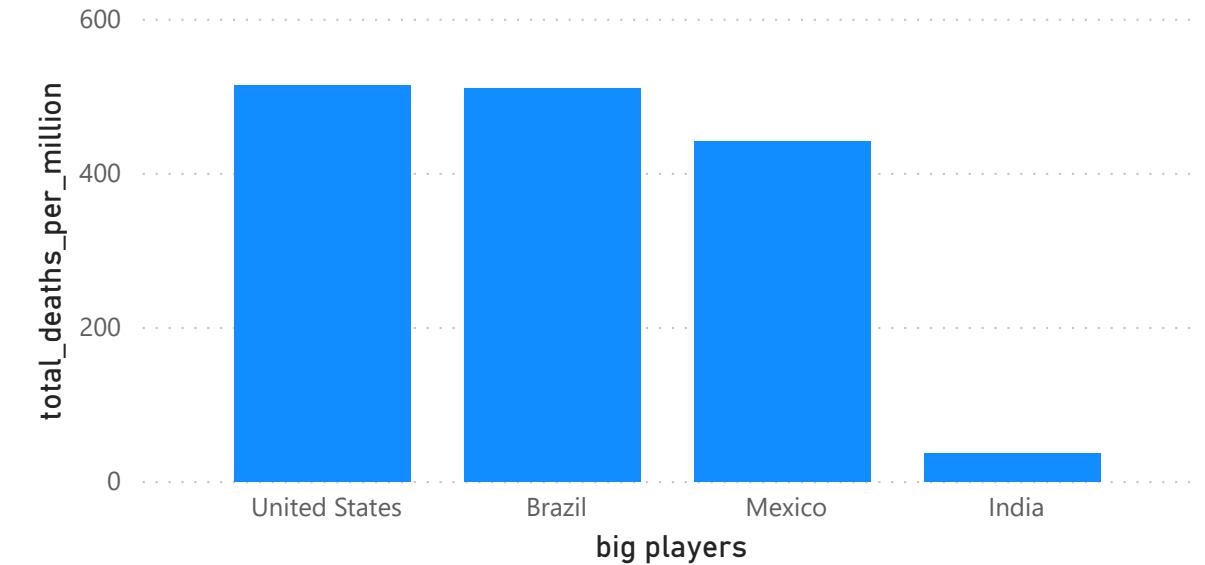
total_cases_per_million by big players



total_deaths by big players



total_deaths_per_million by big players



Last updated on : 18-Aug-2020

As per our cluster definition, big players are countries with consistent deaths in higher volume and density. It is simple to understand if we compare key performance indicators (KPIs) within similar groups.

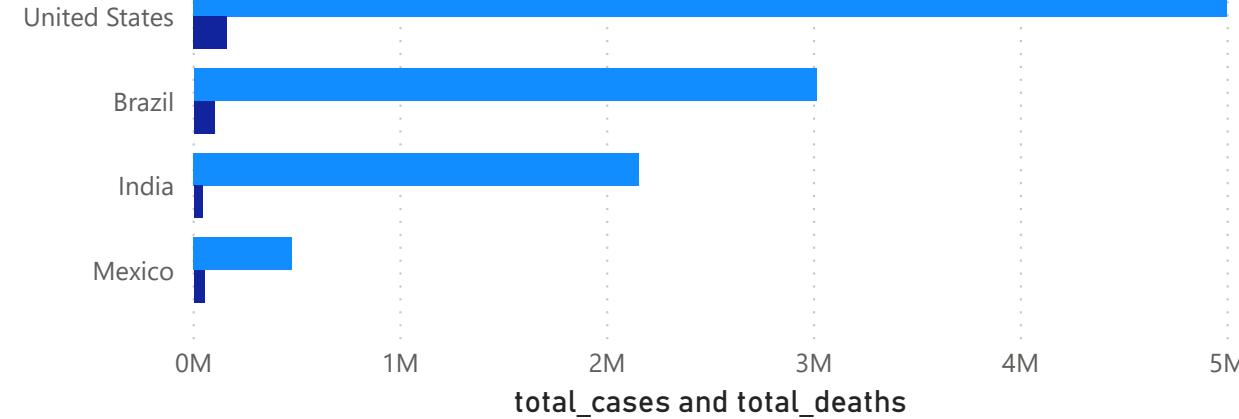
The following charts allow us to understand the KPIs such as total cases, total cases per million, total deaths, and total deaths per million perform within the cluster.

- Total cases by big players (Top left chart)
- Total cases per million by big players (Top right chart)
- Total deaths by big players (Bottom left chart)
- Total deaths per million by big players (Bottom right chart)

Data last updated on 18-Aug-2020. If you want to look at the KPIs for different clusters based on a date, there is a filter option available in the Power BI dashboard (not visible in the picture but available in the Power BI file).

total_cases and total_deaths by big players

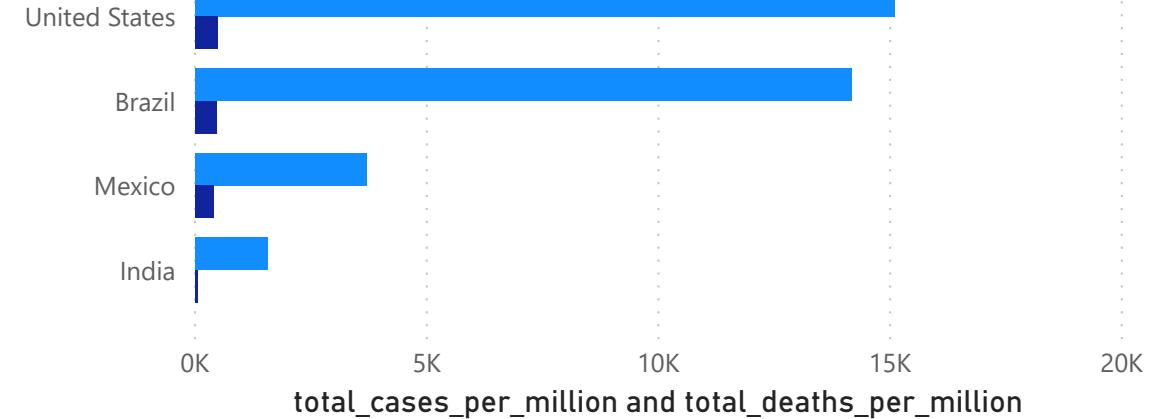
● total_cases ● total_deaths



COVID-19 Dashboard

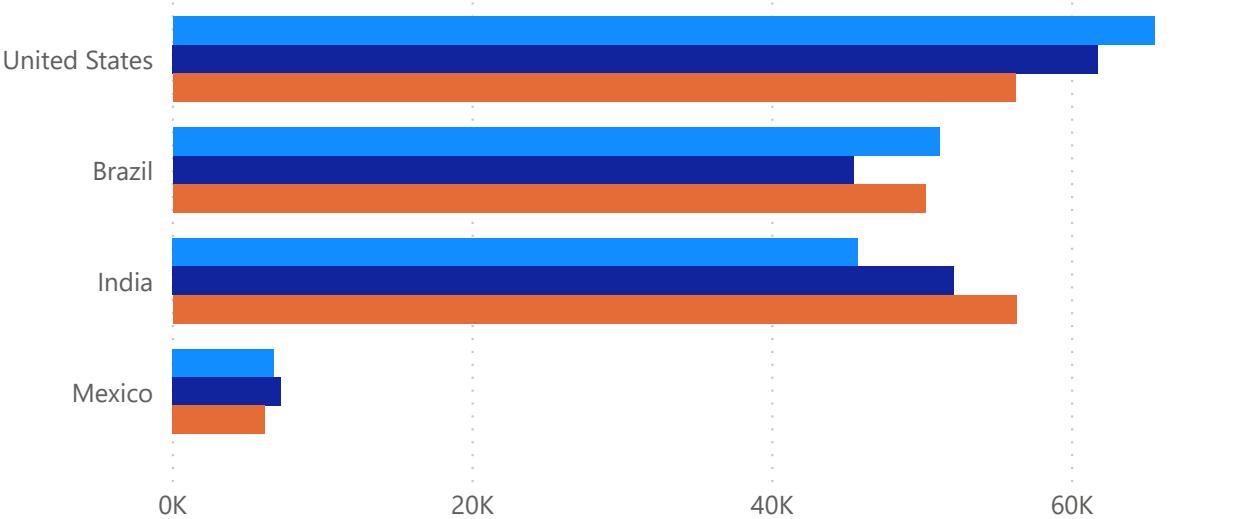
total_cases_per_million and total_deaths_per_million by big players

● total_cases_per_million ● total_deaths_per_million



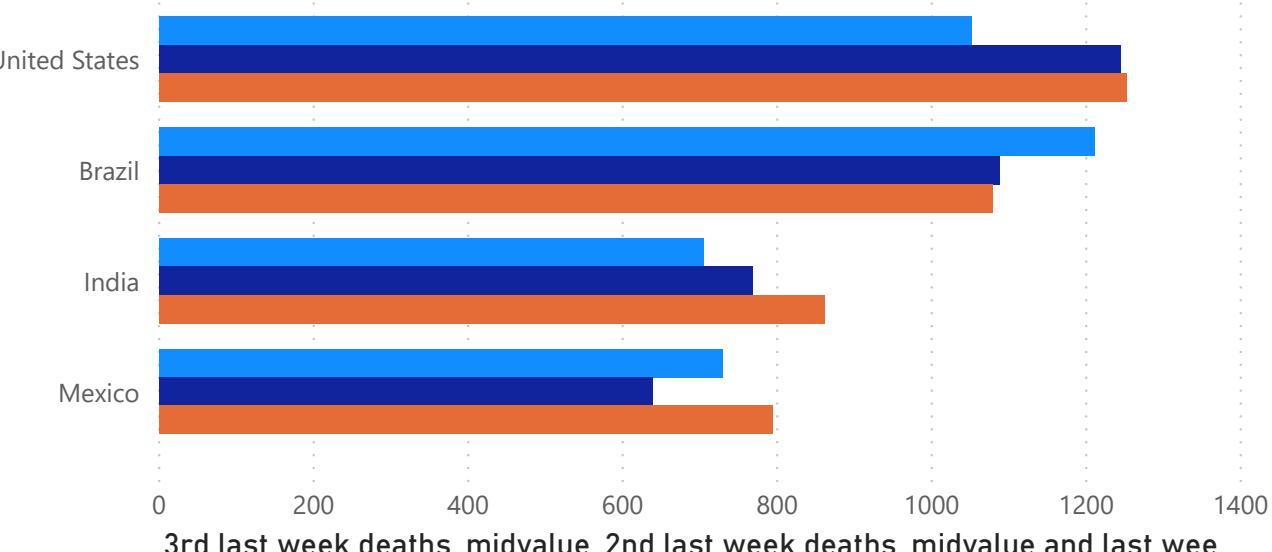
3rd last week cases - midvalue, 2nd last week cases - midvalue and last week cases - midvalue by big players

● 3rd last week cases - midvalue ● 2nd last week cases - midvalue ● last week cases - midvalue



3rd last week deaths_midvalue, 2nd last week deaths_midvalue and last week deaths_midvalue by big players

● 3rd last week deaths_midvalue ● 2nd last week deaths_midvalue ● last week deaths_midvalue



3rd last week cases - midvalue, 2nd last week cases - midvalue and last ...

3rd last week deaths_midvalue, 2nd last week deaths_midvalue and last wee...

If we compare COVID-19 cases and deaths together, we can get some idea about the combined measure (for example, death rate)

- Total cases and total deaths by big players (Top left)
- Total cases per million and total deaths per million by big players (Top right)

KPIs comparison in the last three weeks for big players (*last week vs. second last week vs. third last week*)

1. The median value of the cases reported for the last three weeks (Bottom left chart)
2. The median value of the deaths reported for the last three weeks (Bottom right chart)

Data period for generating these charts are as follows

Last week: Data from 03-Aug-2020 to 09-Aug-2020

Second last week: Data from 27-Jul-2020 to 02-Aug-2020

Third last week: Data from 20-Jul-2020 to 26-Jul-2020

Variable definition

1.1).3rd last week cases – midvalue : Median value of the cases reported in the third week

1.2).2nd last week cases – midvalue : Median value of the cases reported in the second week

1.3).last week cases – midvalue : Median value of the cases reported in the last week

2.1).3rd last week deaths – midvalue : Median value of the deaths reported in the third week

2.2).2nd last week deaths - midvalue: Median value of the deaths reported in the second week

2.3).last week deaths – midvalue : Median value of the deaths reported in the last week

COVID-19 Dashboard

03-01-2020 09-08-2020



Countries	new_cases
United States	4998017
Brazil	3012412
India	2153010
Russia	882347
South Africa	553188
Mexico	475902
Peru	471012
Colombia	376870
Chile	371023
Iran	324692
United Kingdom	309763
Saudi Arabia	287262
Pakistan	284121
Bangladesh	255113
Italy	250103
Turkey	239622
Argentina	235664
Germany	215891
France	197921
Iraq	147389
Philippines	126885

Countries	new_deaths
United States	162425
Brazil	100477
Mexico	52006
United Kingdom	46566
India	43379
Italy	35203
France	30324
Peru	20844
Iran	18264
Russia	14854
Colombia	12540
South Africa	10210
Chile	10011
Belgium	9870
Germany	9196
Canada	8976
Netherlands	6157
Pakistan	6082
Ecuador	5916
Turkey	5829
Sweden	5763

COVID-19 cases per one million population

Countries	total_cases_per_million
Qatar	39,100.19
Bahrain	25,640.24
Chile	19,408.82
Panama	17,069.52
Kuwait	16,672.04
Oman	15,931.67
United States	15,099.63
Peru	14,285.28
Brazil	14,172.09
Armenia	13,561.20
Israel	9,527.42
Singapore	9,389.02
South Africa	9,327.27
Saudi Arabia	8,251.37
Sweden	8,151.38
Bolivia	7,629.13
Puerto Rico	7,488.71
Colombia	7,406.62
Belarus	7,274.39
Dominican Republic	7,262.05
Moldova	6,802.99

COVID-19 deaths per one million population

Countries	total_deaths_per_million
Belgium	851.62
United Kingdom	685.94
Peru	632.18
Italy	582.24
Sweden	570.64
Chile	523.69
United States	490.71
Brazil	472.70
France	464.57
Mexico	403.36
Panama	372.91
Netherlands	359.33
Ireland	358.87
Ecuador	335.32
Bolivia	315.86
Armenia	264.91
Macedonia	251.03
Colombia	246.45
Canada	237.82
Kyrgyzstan	225.01
Iran	217.45

Note: Top left slicer allows us to traverse through each day figures

Exclusion: Countries with less than one million population

Last updated on - 09 Aug 2020

Top left slicer in the Power BI dashboard allows us to traverse through each day figures (new cases and deaths) from 31-Dec-2019 to 09-Aug-2020

1. Country-wise COVID-19 new cases
2. Country-wise COVID-19 new deaths

Countries with less than one million population excluded for the following tables

Country-wise COVID-19 cases per one million population as of 09-Aug-2020

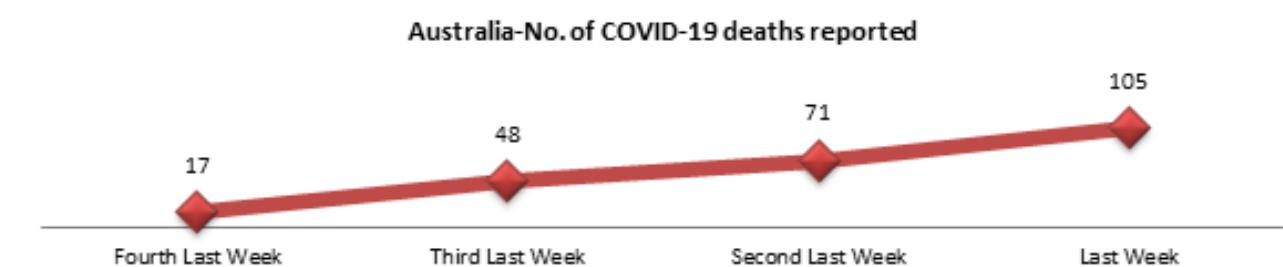
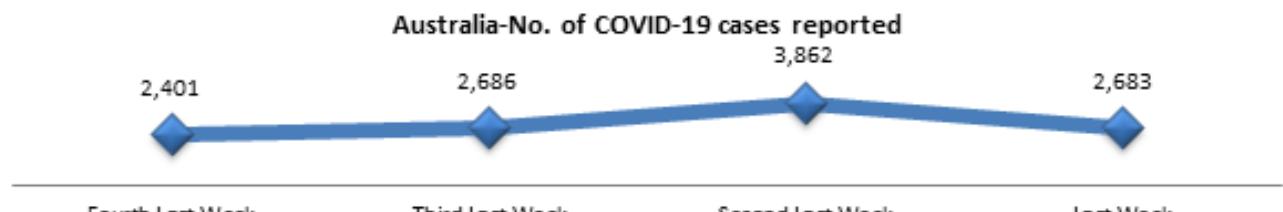
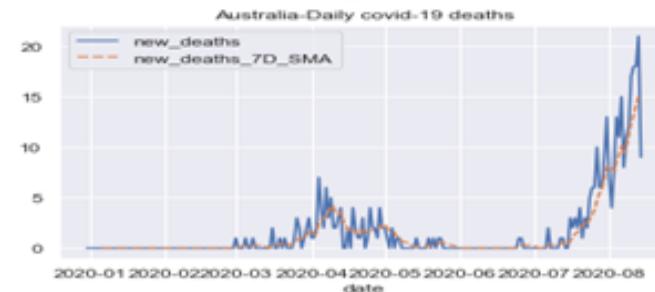
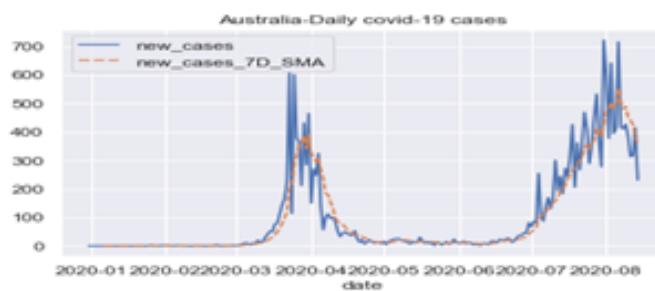
Country-wise COVID-19 deaths per one million population as of 09-Aug-2020

Please select the country

Australia

COVID-19 Dashboard

Data Reporting Period	From	31-Dec-19	15-Jul-20	17-Jul-20	24-Jul-20	31-Jul-20	07-Aug-20
	To	13-Aug-20	13-Aug-20	23-Jul-20	30-Jul-20	06-Aug-20	13-Aug-20
COVID-19		Total	Last 30Days	Fourth Last Week	Third Last Week	Second Last Week	Last Week
No. of COVID-19 cases reported		22,127	12,147	2,401	2,686	3,862	2,683
No. of COVID-19 deaths reported		352	244	17	48	71	105
Rank based on no. of cases reported		70	52	54	55	42	52
Rank based on no. of deaths reported		71	43	69	46	40	31



Last updated on : 13-Aug-2020

COVID-19 Trend and country-wise rank

Excel Table: It provides the following information for each country in different period

- No. of COVID-19 cases reported
- No. of COVID-19 deaths reported
- Rank based on no. of cases reported
- Rank based on no. of deaths reported

Excel Charts: It provides the last four-week COVID-19 trend for each country

Data period for generating these tables and charts are as follows

Last week: Data from 07-Aug-2020 to 13-Aug-2020

Second last week: Data from 31-Jul-2020 to 06-Aug-2020

Third last week: Data from 24-Jul-2020 to 30-Jul-2020

Fourth last week: Data from 17-Jul-2020 to 23-Jul-2020

Last 30 days: Data from 15-Jul-2020 to 13-Aug-2020

Total: Data from 31-Dec-2020 to 13-Aug-2020

Jupyter Notebook Time Series Charts: Available only for some specific countries