

Melbourne Business School
Centre for Business Analytics

COVID-19 Policy Measures Dataset

Melbourne Business Analytics Datathon 2021



COVID-19 Policy Measures Information Sheet

1. Data Overview

The COVID-19 Policy Measures Dataset provides detailed descriptions of measures governments have taken to reduce and control the spread of COVID-19, including restrictions on international travel, social distancing measures, testing policies, etc. The dataset includes 20 countries, 4 of which have been broken down into state level policies (USA, Australia, Great Britain and Canada), and 31 different types of policy measures.

There are different levels of disclosure for each country, therefore the information available may vary by location. Additionally, not all countries are equally up to date as this is an ongoing situation. Please be aware of any recent changes that may not yet have been included in the database.

The provided dataset includes 2 tables:

- Measures
- COVID-19 case data

1.1 Table 1: Measures

This table contains details on COVID-19 related policies at a country and region level. The policy data has been collected from the 1st of January 2020 until the date of last update, 10th February 2021.

Column Name	Description	Data Type
CountryName	The name of country	String
CountryCode	3 letter ISO country code	String
RegionName	Name of the region. eg: <ul style="list-style-type: none">- 'National' if the data is at a national level- 'California' if the data is at a state level (for USA)	String
SubRegionName	Only used to differentiate between Regional and Metropolitan Victoria. NA for all other regions.	String

PolicyID	An identifier for the type of policy measure	String
PolicyCategory**	The broad policy category	String
PolicyMeasure**	More specified measure type under the policy category	String
MeasureID	An unique identifier for a particular measure	String
StartDate	Date from which the measure is in effect	Date in dd/mm/yyyy format
EndDate	Final date that the measure is in effect *	Date in dd/mm/yyyy format*
Description	A detailed description of the policy in place	String

* 'CURRENT' for a measure represents measures that are currently in effect

**The complete list of policy categories considered in the data collection process is summarised in section 5.

- 'UNRESTRICTED' for a particular measure represents time periods when there are no COVID-19 related policies for that measure.
- 'UNKNOWN' for a particular measure represents time periods when the measures taken were not specified anywhere.
- Note that the policy data is mapped over the entire time frame ensuring that the end date of a measure matches the start date of the subsequent one so that the measure applicable at any date is known. Refer to example below:

Policy Measure	Start Date	End Date	Description
Closing Internal Borders	01/01/2020	10/03/2020	UNRESTRICTED
Closing Internal Borders	10/03/2020	12/11/2020	Borders with VIC closed.
Closing Internal Borders	12/11/2020	CURRENT	Borders with NSW and VIC closed.

1.2 Table 2: COVID-19 case data

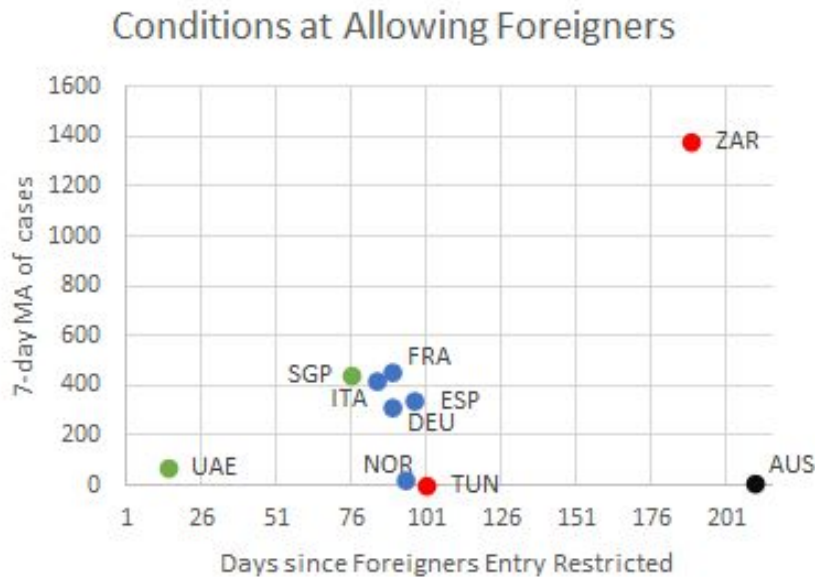
This table contains time series data of covid cases and deaths for each country/region from 1st January 2020 to 10th February 2021 at a daily frequency. Note that the data available may vary by location.

Column Name	Description	Data Type
CountryCode	3 letter ISO country code	String
RegionName	Name of the region. eg: <ul style="list-style-type: none"> - 'National' if the data is at a national level - 'California' if the data is at a state level (for USA) 	String
Date	Date for which data is recorded	Date in dd/mm/yyyy format
Cases	Cumulative number of COVID-19 cases recorded up to the specified date	Integer*
Deaths	Cumulative number of COVID-19 related deaths recorded up to the specified date	Integer*
NewCases	Number of new COVID-19 cases recorded on the specified date	Integer*
NewDeaths	Number of new COVID-19 related deaths recorded on the specified date	Integer*

* 'UNKNOWN' for *cases, deaths, new cases and new deaths* represents missing values in the dataset.

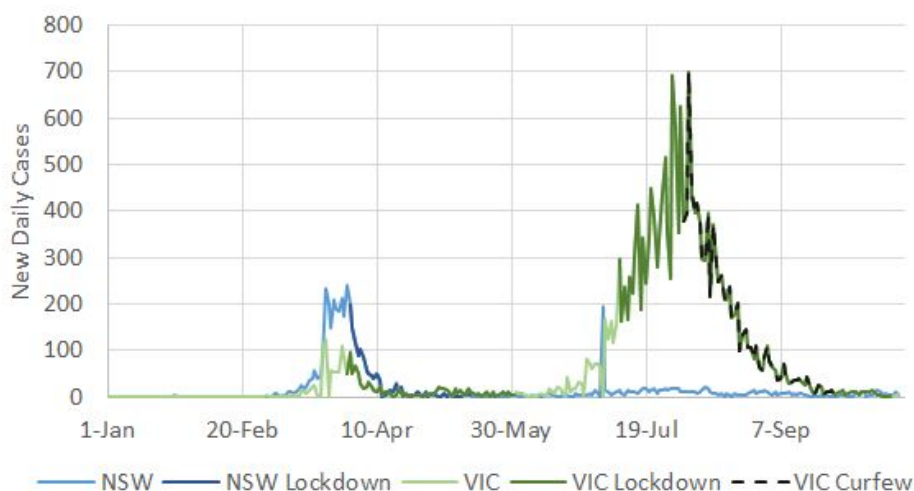
3. Use Cases and Suggestions

3.1. Welcoming Foreigners

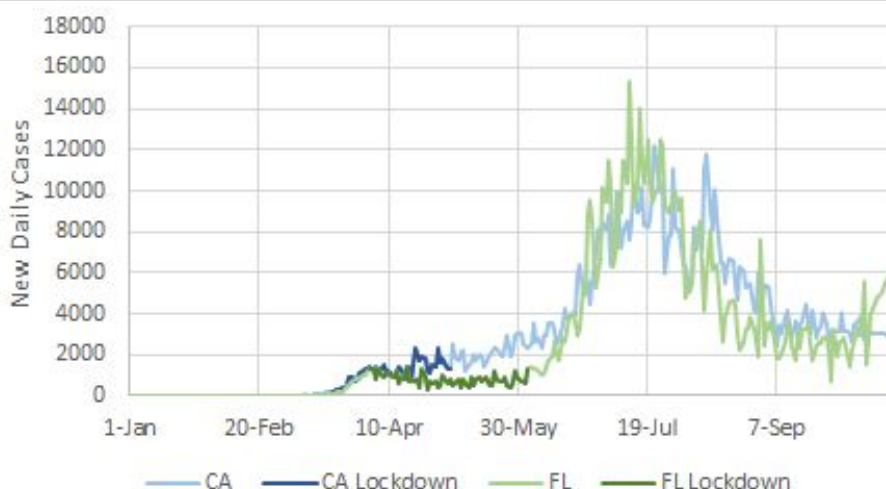


How long before foreigners were welcomed again into some countries and what was the situation when they were welcomed back? Was the decision to allow foreigners back in case-driven or time-driven? Are there similarities across certain countries?

3.2. Impact of Lockdowns



How do lockdowns control outbreaks? How long does it take case numbers to decrease when certain restrictions are in place? Are there cases where numbers decreased even without a lockdown?



4. Acknowledgement

The following databases were accessed to extract numerical data on the number of cases and deaths in each location:

- Oxford COVID-19 Government Response Tracker (OxCGRT)
 - Adam Mahdi, Piotr Blaszczyk, Pawel Dlotko, Dario Salvi, Tak-Shing Chan, John Harvey, Davide Gurnari, Yue Wu, Ahmad Farhat, Niklas Hellmer, Alexander Zarebski, Bernie Hogan, Lionel Tarassenko, Oxford COVID-19 Database: a multimodal data repository for better understanding the global impact of COVID-19. University of Oxford, 2020. medRxiv (doi: <https://doi.org/10.1101/2020.08.18.20177147>).
- COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University
 - Dong E, Du H, Gardner L. An interactive web-based dashboard to track COVID-19 in real time. Lancet Inf Dis. 20(5):533-534. doi: 10.1016/S1473-3099(20)30120-1"

5. Appendix: Policy Category Descriptions

PolicyID	PolicyCategory	PolicyMeasure	InformationProvided
P001	Individual measures	Using other personal protective equipment	Additional protective equipment required or recommended
P002	Individual measures	Wearing a mask	When and where it is mandatory. Also for who (kids vs adults)
P003	International travel measures	Closing international land borders	Countries affected
P004	International travel measures	Entry screening and isolation or quarantine	Countries affected. Number of days required. Home or hotel quarantine, testing required
P005	International travel measures	Exit screening and isolation or quarantine	Countries affected. Number of days required. Home or hotel quarantine, testing required
P006	International travel measures	Providing travel advice or warning	Countries affected
P007	International travel measures	Restricting entry	Countries affected
P008	International travel measures	Restricting exit	Countries affected
P009	International travel measures	Restricting visas	Countries affected
P010	International travel measures	Suspending or restricting international ferries or ships	Countries affected
P011	International travel	Suspending or restricting	Countries affected

	measures	international flights	
P012	Domestic travel measures	Closing internal borders	Which borders are closed and when
P013	Domestic travel measures	Stay-at-home order	Lockdown/Curfew and states of emergencies
P014	Domestic travel measures	Suspending or restricting movement	Distance restrictions
P015	Domestic travel measures	Entry screening and isolation or quarantine	Protocols on quarantine for people entering the country
P016	Social gathering measures	Cancelling, closing, restricting or adapting public gatherings outside the home	Number of people restricted. Community facilities, restaurant & bars, sports facilities, places of worship
P017	Social gathering measures	Cancelling, restricting or adapting mass gatherings	Number of people restricted. Sports events and concerts
P018	Social gathering measures	Cancelling, restricting or adapting private gatherings outside the home	Number of people restricted. Weddings and funerals
P019	Social gathering measures	Restricting private gatherings at home	Number of people restricted
P020	Social gathering measures	Closure of businesses and workplaces	Which industries are allowed onsite workers and under what conditions?
P021	Social gathering measures	Closure of schools	Includes TAFE and Higher education
P022	Social gathering measures	Closure of public transport	Which services continue to run
P023	Detecting and isolating cases	Active case detection	Whether authorities go to doors or actively offer tests
P024	Detecting and isolating cases	Isolation	Whether you should isolate following a test and for how long?
P025	Detecting and isolating cases	Test criteria	What symptoms or conditions are required to be tested
P026	Detecting and isolating cases	Passive case detection	Whether citizens submit themselves for tests
P027	Tracing and quarantining contacts	Contact tracing	Expected number of hours required to investigate a case
P028	Tracing and quarantining contacts	Quarantine of contacts	Number of days required. Home or hotel quarantine
P029	Testing policies	General community testing policies	Process of testing, enforced or self-selected
P030	Special population measures	Shielding vulnerable groups	Aged care, preschools, hospitals
P031	Special population measures	Protecting populations in closed settings	Temperature screenings in public places