

# Attributes Descriptions

## Countries Data

country\_name, country\_code

pop\_total: Population, total

pop\_density: Population density (people per sq. km of land area)

GDP: GDP per capita, PPP (current international \$)

basic\_water: People using at least basic drinking water services (% of population)

safe\_water: People using safely managed drinking water services (% of population)

basic\_san: People using at least basic sanitation services (% of population)

safe\_san: People using safely managed sanitation services (% of population)

## Policies Data

### Containment and closure policies

ID	Name	Description	Measurement	Coding
C1	C1_School closing	Record closings of schools and universities	Ordinal scale	1 - recommend closing 2 - require closing (only some levels or categories, eg just high school, or just public schools) 3 - require closing all levels
C2	C2_Workplace closing	Record closings of workplaces	Ordinal scale	1 - recommend closing (or recommend work from home) 2 - require closing (or work from home) for some sectors or categories of workers 3 - require closing (or work from home) for all-but-essential workplaces (eg grocery stores, doctors)
C3	C3_Cancel public events	Record cancelling public events	Ordinal scale	1 - recommend cancelling 2 - require cancelling
C4	C4_Restrictions on gatherings	Record limits on private gatherings	Ordinal scale	1 - restrictions on very large gatherings (the limit is above 1000 people) 2 - restrictions on gatherings between 101-1000 people 3 - restrictions on gatherings between 11-100 people 4 - restrictions on gatherings of 10 people or less
C5	C5_Close public transport	Record closing of public transport	Ordinal scale	1 - recommend closing (or significantly reduce volume/route/means of transport available) 2 - require closing (or prohibit most citizens from using it)
C6	C6_Stay at home requirements	Record orders to "shelter-in-place" and otherwise confine to the home	Ordinal scale	1 - recommend not leaving house 2 - require not leaving house with exceptions for daily exercise, grocery shopping, and 'essential' trips 3 - require not leaving house with minimal exceptions (eg allowed to leave once a week, or only one person can leave at a time, etc)
C7	C7_Restrictions on internal movement	Record restrictions on internal movement between cities/regions	Ordinal scale	1 - recommend not to travel between regions/cities 2 - internal movement restrictions in place
C8	C8_International travel controls	Record restrictions on international travel  Note: this records policy for foreign travellers, not citizens	Ordinal scale	1 - screening arrivals 2 - quarantine arrivals from some or all regions 3 - ban arrivals from some regions 4 - ban on all regions or total border closure

### Economic policies

ID	Name	Description	Measurement	Coding
E1	E1_Income support (for households)	Record if the government is providing direct cash payments to people who lose their jobs or cannot work.  Note: only includes payments to firms if explicitly linked to payroll/salaries	Ordinal scale	1 - government is replacing less than 50% of lost salary (or if a flat sum, it is less than 50% median salary) 2 - government is replacing 50% or more of lost salary (or if a flat sum, it is greater than 50% median salary)
E2	E2_Debt/contract relief (for households)	Record if the government is freezing financial obligations for households (eg stopping loan repayments, preventing services like water from stopping, or banning evictions)	Ordinal scale	1 - narrow relief, specific to one kind of contract 2 - broad debt/contract relief

## Health system policies

ID	Name	Description	Measurement	Coding
H1	H1_Public information campaigns	Record presence of public info campaigns	Ordinal scale	1 - public officials urging caution about Covid-19 2- coordinated public information campaign (eg across traditional and social media)
H2	H2_Testing policy	Record government policy on who has access to testing  Note: this records policies about testing for current infection (PCR tests) not testing for immunity (antibody test)	Ordinal scale	1 - only those who both (a) have symptoms AND (b) meet specific criteria (eg key workers, admitted to hospital, came into contact with a known case, returned from overseas) 2 - testing of anyone showing Covid-19 symptoms 3 - open public testing (eg "drive through" testing available to asymptomatic people)
H3	H3_Contact tracing	Record government policy on contact tracing after a positive diagnosis  Note: we are looking for policies that would identify all people potentially exposed to Covid-19; voluntary bluetooth apps are unlikely to achieve this	Ordinal scale	1 - limited contact tracing; not done for all cases 2 - comprehensive contact tracing; done for all identified cases
H6	H6_Facial Coverings	Record policies on the use of facial coverings outside the home	Ordinal scale	1 - Recommended 2 - Required in some specified shared/public spaces outside the home with other people present, or some situations when social distancing not possible 3 - Required in all shared/public spaces outside the home with other people present or all situations when social distancing not possible 4 - Required outside the home at all times regardless of location or presence of other people

## Related Indexes

'StringencyIndex', 'GovernmentResponseIndex', 'ContainmentHealthIndex', 'EconomicSupportIndex'

## Survey Data

All of the following are weighted to adjust for survey biases.

pct\_fever - Estimated percentage of people reporting that they have experienced a fever in the past 24 hours

pct\_cough - Estimated percentage of people reporting that they have experienced a cough in the past 24 hours

pct\_difficulty\_breathing - Estimated percentage of people reporting that they have experienced difficulty breathing in the past 24 hours

pct\_fatigue - Estimated percentage of people reporting that they have experienced fatigue in the past 24 hours

pct\_stuffy\_runny\_nose - Estimated percentage of people reporting that they have experienced a stuffy or runny nose in the past 24 hours

pct\_aches\_muscle\_pain - Estimated percentage of people reporting that they have experienced aches or muscle pain in the past 24 hours

pct\_sore\_throat - Estimated percentage of people reporting that they have experienced a sore throat in the past 24 hours

pct\_chest\_pain - Estimated percentage of people reporting that they have experienced chest pain in the past 24 hours

pct\_nausea - Estimated percentage of people reporting that they have experienced nausea in the past 24 hours

pct\_anosmia\_ageusia - Estimated percentage of people reporting that they have experienced loss of smell or taste in the past 24 hours

pct\_eye\_pain - Estimated percentage of people reporting that they have experienced eye pain in the past 24 hours

pct\_headache - Estimated percentage of people reporting that they have experienced headaches in the past 24 hours

pct\_chills - Estimated percentage of people reporting that they have experienced chills in the past 24 hours

pct\_cmnty\_sick -- Estimated percentage of people who personally know anyone in their local community reporting COVID-like illness

pct\_ever\_tested - Estimated percentage of people reporting that they have ever gotten a test for COVID-19

pct\_tested\_recently - Estimated percentage of people reporting that they have ever gotten a test for COVID-19 recently\* (last 14 days)

pct\_worked\_outside\_home - Estimated percentage of people reporting that they gone to work outside of the place they are staying in the last 24 hours

pct\_grocery\_outside\_home - Estimated percentage of people reporting that they gone to a grocery store, market, or pharmacy in the last 24 hours

pct\_ate\_outside\_home - Estimated percentage of people reporting that they gone to a restaurant, cafe, or shopping center in the last 24 hours

pct\_spent\_time\_with\_non\_hh - Estimated percentage of people reporting that they spent time with someone not staying with them over the last 24 hours

pct\_attended\_public\_event - Estimated percentage of people reporting that they attended a public event with more than 10 people in the last 24 hours

pct\_used\_public\_transit - Estimated percentage of people reporting that they used public transit in the last 24 hours

pct\_direct\_contact\_with\_non\_hh - Estimated percentage of people reporting that they have had direct contact (spending longer than 1 minute within 2 meters, or shaking hands, hugging, or kissing) with someone outside of their household in the last 24 hours

pct\_wear\_mask\_all\_time - Estimated percentage of people reporting that they wore a mask all the time when in public

pct\_wear\_mask\_most\_time - Estimated percentage of people reporting that they wore a mask most of the time when in public

pct\_wear\_mask\_half\_time - Estimated percentage of people reporting that they wore a mask half of the time when in public

pct\_wear\_mask\_some\_time - Estimated percentage of people reporting that they wore a mask all the time when in public

pct\_wear\_mask\_none\_time - Estimated percentage of people reporting that they did not wear a mask when in public

pct\_no\_public - Estimated percentage of people reporting that they they have not gone in public in the last 7 days

## Mobility Data

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### Traveling Data

Relative volume of directions requests from Apple compared to a baseline volume on 13 January 2020

Driving, Walking, Transit

### Activity in Areas

Relative activity for the corresponding areas compared to a baseline, which is the median value, for the corresponding day of the week, during the 5-week period Jan 3–Feb 6, 2020.

Retail and recreation: restaurants, cafes, shopping centers, theme parks, museums, libraries, and movie theaters.

Grocery and pharmacy: grocery markets, food warehouses, farmers markets, specialty food shops, drug stores, and pharmacies.

Parks: national parks, public beaches, marinas, dog parks, plazas, and public gardens

Transit stations: public transport hubs such as subway, bus, and train stations

Workplaces

Residential

## COVID Data

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prev\_cases: previous number of confirmed cases

new\_cases\_percentages: newly confirmed cases in percentage of the country's population (target variable), divided into four classes:

1. Class 0:  $\leq 0.000441\%$  of population
2. Class 1:  $> 0.000441\%$ ,  $\leq 0.00221\%$  of population
3. Class 2:  $> 0.00221\%$ ,  $\leq 0.00788\%$  of population
4. Class 3:  $> 0.00788\%$  of population