**Appendix A**

Source: <https://github.com/owid/covid-19-data/blob/master/public/data/owid-covid-data-codebook.md>

| **Column** | **Description** | **Source** |
| --- | --- | --- |
| iso\_code | ISO 3166-1 alpha-3 – three-letter country codes | International Organization for Standardization |
| continent | Continent of the geographical location | Our World in Data |
| location | Geographical location | Our World in Data |
| date | Date of observation | Our World in Data |
| total\_cases | Total confirmed cases of COVID-19 | European Centre for Disease Prevention and Control |
| new\_cases | New confirmed cases of COVID-19 | European Centre for Disease Prevention and Control |
| total\_deaths | Total deaths attributed to COVID-19 | European Centre for Disease Prevention and Control |
| new\_deaths | New deaths attributed to COVID-19 | European Centre for Disease Prevention and Control |
| total\_cases\_per\_million | Total confirmed cases of COVID-19 per 1,000,000 people | European Centre for Disease Prevention and Control |
| new\_cases\_per\_million | New confirmed cases of COVID-19 per 1,000,000 people | European Centre for Disease Prevention and Control |
| total\_deaths\_per\_million | Total deaths attributed to COVID-19 per 1,000,000 people | European Centre for Disease Prevention and Control |
| new\_deaths\_per\_million | New deaths attributed to COVID-19 per 1,000,000 people | European Centre for Disease Prevention and Control |
| total\_tests | Total tests for COVID-19 | National government reports |
| new\_tests | New tests for COVID-19 | National government reports |
| new\_tests\_smoothed | New tests for COVID-19 (7-day smoothed). For countries that don't report testing data on a daily basis, we assume that testing changed equally on a daily basis over any periods in which no data was reported. This produces a complete series of daily figures, which is then averaged over a rolling 7-day window | National government reports |
| total\_tests\_per\_thousand | Total tests for COVID-19 per 1,000 people | National government reports |
| new\_tests\_per\_thousand | New tests for COVID-19 per 1,000 people | National government reports |
| new\_tests\_smoothed\_per\_thousand | New tests for COVID-19 (7-day smoothed) per 1,000 people | National government reports |
| tests\_units | Units used by the location to report its testing data | National government reports |
| stringency\_index | Government Response Stringency Index: composite measure based on 9 response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest response) | Oxford COVID-19 Government Response Tracker, Blavatnik School of Government |
| population | Population in 2020 | United Nations, Department of Economic and Social Affairs, Population Division, World Population Prospects: The 2019 Revision |
| population\_density | Number of people divided by land area, measured in square kilometers, most recent year available | World Bank – World Development Indicators, sourced from Food and Agriculture Organization and World Bank estimates |
| median\_age | Median age of the population, UN projection for 2020 | UN Population Division, World Population Prospects, 2017 Revision |
| aged\_65\_older | Share of the population that is 65 years and older, most recent year available | World Bank – World Development Indicators, based on age/sex distributions of United Nations Population Division's World Population Prospects: 2017 Revision |
| aged\_70\_older | Share of the population that is 70 years and older in 2015 | United Nations, Department of Economic and Social Affairs, Population Division (2017), World Population Prospects: The 2017 Revision |
| gdp\_per\_capita | Gross domestic product at purchasing power parity (constant 2011 international dollars), most recent year available | World Bank – World Development Indicators, source from World Bank, International Comparison Program database |
| extreme\_poverty | Share of the population living in extreme poverty, most recent year available since 2010 | World Bank – World Development Indicators, sourced from World Bank Development Research Group |
| cvd\_death\_rate | Death rate from cardiovascular disease in 2017 | Global Burden of Disease Collaborative Network, Global Burden of Disease Study 2017 Results |
| diabetes\_prevalence | Diabetes prevalence (% of population aged 20 to 79) in 2017 | World Bank – World Development Indicators, sourced from International Diabetes Federation, Diabetes Atlas |
| female\_smokers | Share of women who smoke, most recent year available | World Bank – World Development Indicators, sourced from World Health Organization, Global Health Observatory Data Repository |
| male\_smokers | Share of men who smoke, most recent year available | World Bank – World Development Indicators, sourced from World Health Organization, Global Health Observatory Data Repository |
| handwashing\_facilities | Share of the population with basic handwashing facilities on premises, most recent year available | United Nations Statistics Division |
| hospital\_beds\_per\_thousand | Hospital beds per 1,000 people, most recent year available since 2010 | OECD, Eurostat, World Bank, national government records and other sources |
| life\_expectancy | Life expectancy at birth in 2019 | James C. Riley, Clio Infra, United Nations Population Division |

**Appendix B**

Source: <https://www.ecdc.europa.eu/sites/default/files/documents/Variable_Dictionary_and_Disclaimer.pdf>

|  |  |  |
| --- | --- | --- |
| **Variable** | **Definition** | **Code** |
| **Country** | Country | String |
| **Response\_measure** | StayHomeOrder = Stay-at-home orders for the general population (these are enforced and also referred to as ‘lockdown’) StayHomeGen = Stay-at-home recommendations for the general population (which are voluntary or not enforced)  StayHomeRiskG = Stay-at-home recommendations for risk groups or vulnerable populations (such as the elderly, people with underlying health conditions, physically disabled people, etc.)  ClosDaycare = Closure of educational institutions: daycare or nursery.  ClosPrim = Closure of educational institutions: primary schools.  ClosSec = Closure of educational institutions: secondary schools.  ClosHigh = Closure of educational institutions: higher education.  MassGatherAll = Interventions are in place to limit mass/public gatherings (limit of 1000 or less individuals allowed).  ClosPubAny = Closure of public spaces of any kind (including restaurants, entertainment venues, non-essential shops, partial or full closure of public transport, gyms and sport centers, etc).  MasksVoluntary = Protective mask use in public spaces/transport on voluntary basis (general recommendation not enforced)  MasksMandatory = Protective mask use in public spaces/transport on mandatory basis (enforced by law)  TeleworkingClosures = Teleworking recommendation or workplace closures  StayHomeOrderPartial = Stay-at-home orders for the general population (these are enforced and also referred to as ‘lockdown’) – partially relaxed measure  StayHomeGenPartial = Stay-at-home recommendations for the general population (which are voluntary or not enforced) – partially relaxed measure  StayHomeRiskGPartial = Stay-at-home recommendations for risk groups or vulnerable populations (such as the elderly, people with underlying health conditions, physically disabled people, etc.) – partially relaxed measure  ClosDaycarePartial = Closure of educational institutions: daycare or nursery – partially relaxed measure  ClosPrimPartial = Closure of educational institutions: primary schools – partially relaxed measure  ClosSecPartial = Closure of educational institutions: secondary schools – partially relaxed measure  ClosHighPartial = Closure of educational institutions: higher education – partially relaxed measure  MassGatherAllPartial = Interventions are in place to limit mass/public gatherings (with a specific limit of |  |
| **date\_start** | Start date of the intervention/response measure | DD/MM/YYYY |
| **date\_end** | End date of the intervention/response measure (NA indicates a measure that is still active on the date of the file/end date in the future) | DD/MM/YYYY |

**Appendix C**

Source:

<https://www.google.com/covid19/mobility/data_documentation.html?hl=en>

Place categories

**Grocery & pharmacy**

Mobility trends for places like grocery markets, food warehouses, farmers markets, specialty food shops, drug stores, and pharmacies.

**Parks**

Mobility trends for places like local parks, national parks, public beaches, marinas, dog parks, plazas, and public gardens.

**Transit stations**

Mobility trends for places like public transport hubs such as subway, bus, and train stations.

**Retail & recreation**

Mobility trends for places like restaurants, cafes, shopping centers, theme parks, museums, libraries, and movie theaters.

**Residential**

Mobility trends for places of residence.

**Workplaces**

Mobility trends for places of work.

These datasets show how visits and length of stay at different places change compared to a baseline. We calculate these changes using the same kind of aggregated and anonymized data used to show popular times for places in Google Maps.

Changes for each day are compared to a baseline value for that day of the week:

The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3–Feb 6, 2020.

The datasets show trends over several months with the most recent data representing approximately 2-3 days ago—this is how long it takes to produce the datasets.

What data is included in the calculation depends on user settings, connectivity, and whether it meets our privacy threshold. When the data doesn't meet quality and privacy thresholds, you might see empty fields for certain places and dates.

We include categories that are useful to social distancing efforts as well as access to essential services.

We calculate these insights based on data from users who have opted-in to Location History for their Google Account, so the data represents a sample of our users. As with all samples, this may or may not represent the exact behavior of a wider population.

We continue to improve our reports as places close and reopen. We updated the way we calculate changes for Groceries & pharmacy, Retail & recreation, Transit stations, and Parks categories. For regions published before May 2020, the data may contain a consistent shift either up or down that starts between April 11–18, 2020.