

Covid Data - Info about the columns and nature of data in the columns

#	Column	Non-Null Count	Dtype
---	-----	-----	-----
0	iso_code	228983 non-null	object
1	continent	216050 non-null	object
2	location	228983 non-null	object
3	date	228983 non-null	object
4	total_cases	215997 non-null	float64
5	new_cases	215741 non-null	float64
6	new_cases_smoothed	214545 non-null	float64
7	total_deaths	196813 non-null	float64
8	new_deaths	196763 non-null	float64
9	new_deaths_smoothed	195583 non-null	float64
10	total_cases_per_million	215010 non-null	float64
11	new_cases_per_million	214754 non-null	float64
12	new_cases_smoothed_per_million	213563 non-null	float64
13	total_deaths_per_million	195839 non-null	float64
14	new_deaths_per_million	195789 non-null	float64
15	new_deaths_smoothed_per_million	194614 non-null	float64
16	reproduction_rate	169821 non-null	float64
17	icu_patients	30819 non-null	float64
18	icu_patients_per_million	30819 non-null	float64
19	hosp_patients	34631 non-null	float64
20	hosp_patients_per_million	34631 non-null	float64
21	weekly_icu_admissions	7795 non-null	float64
22	weekly_icu_admissions_per_million	7795 non-null	float64
23	weekly_hosp_admissions	18515 non-null	float64
24	weekly_hosp_admissions_per_million	18515 non-null	float64
25	total_tests	79387 non-null	float64
26	new_tests	75403 non-null	float64
27	total_tests_per_thousand	79387 non-null	float64
28	new_tests_per_thousand	75403 non-null	float64
29	new_tests_smoothed	103965 non-null	float64
30	new_tests_smoothed_per_thousand	103965 non-null	float64
31	positive_rate	95927 non-null	float64
32	tests_per_case	94348 non-null	float64
33	tests_units	106788 non-null	object
34	total_vaccinations	65470 non-null	float64
35	people_vaccinated	62685 non-null	float64
36	people_fully_vaccinated	59988 non-null	float64
37	total_boosters	35643 non-null	float64
38	new_vaccinations	54247 non-null	float64
39	new_vaccinations_smoothed	133612 non-null	float64
40	total_vaccinations_per_hundred	65470 non-null	float64
41	people_vaccinated_per_hundred	62685 non-null	float64
42	people_fully_vaccinated_per_hundred	59988 non-null	float64
43	total_boosters_per_hundred	35643 non-null	float64
44	new_vaccinations_smoothed_per_million	133612 non-null	float64
45	new_people_vaccinated_smoothed	133153 non-null	float64
46	new_people_vaccinated_smoothed_per_hundred	133153 non-null	float64
47	stringency_index	168842 non-null	float64
48	population_density	200014 non-null	float64

49	median_age	185066	non-null	float64
50	aged_65_older	183113	non-null	float64
51	aged_70_older	184098	non-null	float64
52	gdp_per_capita	184467	non-null	float64
53	extreme_poverty	120181	non-null	float64
54	cardiovasc_death_rate	184567	non-null	float64
55	diabetes_prevalence	194056	non-null	float64
56	female_smokers	139736	non-null	float64
57	male_smokers	137823	non-null	float64
58	handwashing_facilities	90864	non-null	float64
59	hospital_beds_per_thousand	164280	non-null	float64
60	life_expectancy	210425	non-null	float64
61	human_development_index	180056	non-null	float64
62	population	227996	non-null	float64
63	excess_mortality_cumulative_absolute	7686	non-null	float64
64	excess_mortality_cumulative	7686	non-null	float64
65	excess_mortality	7736	non-null	float64
66	excess_mortality_cumulative_per_million	7686	non-null	float64

Confirmed cases

Variable	Description
<code>total_cases</code>	Total confirmed cases of COVID-19. Counts can include probable cases, where reported.
<code>new_cases</code>	New confirmed cases of COVID-19. Counts can include probable cases, where reported. In rare cases where our source reports a negative daily change due to a data correction, we set this metric to NA.
<code>new_cases_smoothed</code>	New confirmed cases of COVID-19 (7-day smoothed). Counts can include probable cases, where reported.
<code>total_cases_per_million</code>	Total confirmed cases of COVID-19 per 1,000,000 people. Counts can include probable cases, where reported.
<code>new_cases_per_million</code>	New confirmed cases of COVID-19 per 1,000,000 people. Counts can include probable cases, where reported.
<code>new_cases_smoothed_per_million</code>	New confirmed cases of COVID-19 (7-day smoothed) per 1,000,000 people. Counts can include probable cases, where reported.

Confirmed deaths

Variable	Description
<code>total_deaths</code>	Total deaths attributed to COVID-19. Counts can include probable deaths, where reported.
<code>new_deaths</code>	New deaths attributed to COVID-19. Counts can include probable deaths, where reported. In rare cases where our source reports a negative daily change due to a data correction, we set this metric to NA.
<code>new_deaths_smoothed</code>	New deaths attributed to COVID-19 (7-day smoothed). Counts can include probable deaths, where reported.
<code>total_deaths_per_million</code>	Total deaths attributed to COVID-19 per 1,000,000 people. Counts can include probable deaths, where reported.
<code>new_deaths_per_million</code>	New deaths attributed to COVID-19 per 1,000,000 people. Counts can include probable deaths, where reported.
<code>new_deaths_smoothed_per_million</code>	New deaths attributed to COVID-19 (7-day smoothed) per 1,000,000 people. Counts can include probable deaths, where reported.

Excess mortality

Variable	Description
<code>excess_mortality</code>	Percentage difference between the reported number of weekly or monthly deaths in 2020–2021 and the projected number of deaths for the same period based on previous years. For more information, see https://github.com/owid/covid-19-data/tree/master/public/data/excess_mortality
<code>excess_mortality_cumulative</code>	Percentage difference between the cumulative number of deaths since 1 January 2020 and the cumulative projected deaths for the same period based on previous years. For more information, see https://github.com/owid/covid-19-data/tree/master/public/data/excess_mortality
<code>excess_mortality_cumulative_absolute</code>	Cumulative difference between the reported number of deaths since 1 January 2020 and the projected number of deaths for the same period based on previous years. For more information, see https://github.com/owid/covid-19-data/tree/master/public/data/excess_mortality
<code>excess_mortality_cumulative_per_million</code>	Cumulative difference between the reported number of deaths since 1 January 2020 and the projected number of deaths for the same period based on previous years, per million people. For more information, see https://github.com/owid/covid-19-data/tree/master/public/data/excess_mortality

Hospital & ICU

Variable	Description
<code>icu_patients</code>	Number of COVID-19 patients in intensive care units (ICUs) on a given day
<code>icu_patients_per_million</code>	Number of COVID-19 patients in intensive care units (ICUs) on a given day per 1,000,000 people
<code>hosp_patients</code>	Number of COVID-19 patients in hospital on a given day
<code>hosp_patients_per_million</code>	Number of COVID-19 patients in hospital on a given day per 1,000,000 people
<code>weekly_icu_admissions</code>	Number of COVID-19 patients newly admitted to intensive care units (ICUs) in a given week (reporting date and the preceeding 6 days)
<code>weekly_icu_admissions_per_million</code>	Number of COVID-19 patients newly admitted to intensive care units (ICUs) in a given week per 1,000,000 people (reporting date and the preceeding 6 days)
<code>weekly_hosp_admissions</code>	Number of COVID-19 patients newly admitted to hospitals in a given week (reporting date and the preceeding 6 days)
<code>weekly_hosp_admissions_per_million</code>	Number of COVID-19 patients newly admitted to hospitals in a given week per 1,000,000 people (reporting date and the preceeding 6 days)

Policy responses

Variable	Description
<code>stringency_index</code>	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)

Reproduction rate

Variable	Description
<code>reproduction_rate</code>	Real-time estimate of the effective reproduction rate (R) of COVID-19. See https://github.com/crondonm/TrackingR/tree/main/Estimates-Database

Tests & positivity

On 23 June 2022, we stopped adding new datapoints to our COVID-19 testing dataset. You can read more at [#2667](#).

Variable	Description
<code>total_tests</code>	Total tests for COVID-19
<code>new_tests</code>	New tests for COVID-19 (only calculated for consecutive days)
<code>total_tests_per_thousand</code>	Total tests for COVID-19 per 1,000 people
<code>new_tests_per_thousand</code>	New tests for COVID-19 per 1,000 people
<code>new_tests_smoothed</code>	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
<code>new_tests_smoothed_per_thousand</code>	New tests for COVID-19 (7-day smoothed) per 1,000 people
<code>positive_rate</code>	The share of COVID-19 tests that are positive, given as a rolling 7-day average (this is the inverse of <code>tests_per_case</code>)
<code>tests_per_case</code>	Tests conducted per new confirmed case of COVID-19, given as a rolling 7-day average (this is the inverse of <code>positive_rate</code>)
<code>tests_units</code>	Units used by the location to report its testing data. A country file can't contain mixed units. All metrics concerning testing data use the specified test unit. Valid units are 'people tested' (number of people tested), 'tests performed' (number of tests performed, a single person can be tested more than once in a given day) and 'samples tested' (number of samples tested). In some cases, more than one sample may be required to perform a given test.)

Variable	Description
<code>total_vaccinations</code>	Total number of COVID-19 vaccination doses administered
<code>people_vaccinated</code>	Total number of people who received at least one vaccine dose
<code>people_fully_vaccinated</code>	Total number of people who received all doses prescribed by the initial vaccination protocol
<code>total_boosters</code>	Total number of COVID-19 vaccination booster doses administered (doses administered beyond the number prescribed by the vaccination protocol)
<code>new_vaccinations</code>	New COVID-19 vaccination doses administered (only calculated for consecutive days)
<code>new_vaccinations_smoothed</code>	New COVID-19 vaccination doses administered (7-day smoothed). For countries that don't report vaccination data on a daily basis, we assume that vaccination 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
<code>total_vaccinations_per_hundred</code>	Total number of COVID-19 vaccination doses administered per 100 people in the total population
<code>people_vaccinated_per_hundred</code>	Total number of people who received at least one vaccine dose per 100 people in the total population
<code>people_fully_vaccinated_per_hundred</code>	Total number of people who received all doses prescribed by the initial vaccination protocol per 100 people in the total population
<code>total_boosters_per_hundred</code>	Total number of COVID-19 vaccination booster doses administered per 100 people in the total population
<code>new_vaccinations_smoothed_per_million</code>	New COVID-19 vaccination doses administered (7-day smoothed) per 1,000,000 people in the total population
<code>new_people_vaccinated_smoothed</code>	Daily number of people receiving their first vaccine dose (7-day smoothed)
<code>new_people_vaccinated_smoothed_per_hundred</code>	Daily number of people receiving their first vaccine dose (7-day smoothed) per 100 people in the total population

Others

Variable	Description
<code>iso_code</code>	ISO 3166-1 alpha-3 – three-letter country codes. Note that OWID-defined regions (e.g. continents like 'Europe') contain prefix 'OWID_'.
<code>continent</code>	Continent of the geographical location
<code>location</code>	Geographical location. Location 'International' considers special regions ("Diamond Princess" and "MS Zaandam" cruises).
<code>date</code>	Date of observation
<code>population</code>	Population (latest available values). See https://github.com/owid/covid-19-data/blob/master/scripts/input/un/population_latest.csv for full list of sources
<code>population_density</code>	Number of people divided by land area, measured in square kilometers, most recent year available
<code>median_age</code>	Median age of the population, UN projection for 2020
<code>aged_65_older</code>	Share of the population that is 65 years and older, most recent year available
<code>aged_70_older</code>	Share of the population that is 70 years and older in 2015
<code>gdp_per_capita</code>	Gross domestic product at purchasing power parity (constant 2011 international dollars), most recent year available
<code>extreme_poverty</code>	Share of the population living in extreme poverty, most recent year available since 2010
<code>cardiovasc_death_rate</code>	Death rate from cardiovascular disease in 2017 (annual number of deaths per 100,000 people)
<code>diabetes_prevalence</code>	Diabetes prevalence (% of population aged 20 to 79) in 2017
<code>female_smokers</code>	Share of women who smoke, most recent year available
<code>male_smokers</code>	Share of men who smoke, most recent year available
<code>handwashing_facilities</code>	Share of the population with basic handwashing facilities on premises, most recent year available
<code>hospital_beds_per_thousand</code>	Hospital beds per 1,000 people, most recent year available since 2010
<code>life_expectancy</code>	Life expectancy at birth in 2019
<code>human_development_index</code>	A composite index measuring average achievement in three basic dimensions of human development—a long and healthy life, knowledge and a decent standard of living. Values for 2019, imported from http://hdr.undp.org/en/indicators/137506