**Data Definitions**

COVID-19 data definitions change frequently across the 56 jurisdictions we track, so we must sometimes update our data definitions to reflect the realities we find in the data. As we track additional data points and adjust the definition of current fields to accommodate changes from states and territories, we will update the definitions here. We will also publish update notices [on the blog](https://covidtracking.com/blog) for major additions and changes. If you think you’ve spotted an error in the definitions or their use in our compiled data, [please let us know](https://covidtracking.com/contact).

* [Cases](https://covidtracking.com/about-data/data-definitions#cases)
* [PCR tests](https://covidtracking.com/about-data/data-definitions#pcr-tests)
* [Antibody tests](https://covidtracking.com/about-data/data-definitions#antibody-tests)
* [Antigen tests](https://covidtracking.com/about-data/data-definitions#antigen-tests)
* [Hospitalization](https://covidtracking.com/about-data/data-definitions#hospitalization)
* [Outcomes](https://covidtracking.com/about-data/data-definitions#outcomes)
* [State metadata](https://covidtracking.com/about-data/data-definitions#state-metadata)

**Cases**

**Cases (confirmed plus probable)**

API field name: *positive*

Total number of **confirmed plus probable cases** of COVID-19 reported by the state or territory, ideally per the [August 5, 2020 CSTE case definition](https://wwwn.cdc.gov/nndss/conditions/coronavirus-disease-2019-covid-19/case-definition/2020/08/05/). Some states are following the older [April 5th, 2020 CSTE case definition](https://wwwn.cdc.gov/nndss/conditions/coronavirus-disease-2019-covid-19/case-definition/2020/) or using their own custom definitions. Not all states and territories report probable cases. If a state is not reporting probable cases, this field will just represent confirmed cases.

**New cases**

API field name: *positiveIncrease*

The daily increase in API field *positive*, which measures **Cases (confirmed plus probable)** calculated based on the previous day’s value.

**Probable Cases**

API field name: *probableCases*

Total number of **probable cases of COVID-19** as reported by the state or territory, ideally per the [August 5, 2020 CSTE case definition](https://wwwn.cdc.gov/nndss/conditions/coronavirus-disease-2019-covid-19/case-definition/2020/08/05/). By this definition, a probable case is someone who tests positive via antigen without a positive PCR or other approved nucleic acid amplification test (NAAT), someone with clinical and epidemiological evidence of COVID-19 infection with no confirmatory laboratory testing performed for SARS-CoV-2, or someone with COVID-19 listed on their death certificate with no confirmatory laboratory testing performed for SARS-CoV-2. Some states are following the older [April 5th, 2020 CSTE case definition](https://wwwn.cdc.gov/nndss/conditions/coronavirus-disease-2019-covid-19/case-definition/2020/) or using their own custom definitions.

**PCR tests**

**Confirmed Cases**

API field name: *positiveCasesViral*

Total number of **unique people with a positive PCR or other approved nucleic acid amplification test (NAAT)**, as reported by the state or territory. This is equivalent to a **confirmed case** as per the [CSTE case definitions of August 5th, 2020](https://wwwn.cdc.gov/nndss/conditions/coronavirus-disease-2019-covid-19/case-definition/2020/08/05/) and [April 5th, 2020](https://wwwn.cdc.gov/nndss/conditions/coronavirus-disease-2019-covid-19/case-definition/2020/). If we discover a jurisdiction is labeling cases as confirmed using other evidence (e.g. positive antigen tests), we will annotate that state or territory’s data accordingly.

**Negative PCR tests (people)**

API field name: *negative*

Total number of **unique people with a completed PCR test that returns negative**. For states / territories that do not report this number directly, we compute it using one of several methods, depending on which data points the state provides. Due to complex reporting procedures, this number might be mixing units and therefore, at best, it should only be considered an estimate of the number of people with a completed PCR test that return negative.

**Negative PCR tests (specimens)**

API field name: *negativeTestsViral*

Total number of **completed PCR tests (or specimens tested) that return negative** as reported by the state or territory. For states/territories that do not report this number directly, we compute it using one of several methods, depending on which data points the state provides. If we discover that a jurisdiction is including antigen tests in this metric, we will annotate that state or territory’s data accordingly.

**Pending**

API field name: *pending*

Total number of **viral tests that have not been completed** as reported by the state or territory.

**Positive PCR tests (specimens)**

API field name: *positiveTestsViral*

Total number of **completed PCR tests (or specimens tested) that return positive** as reported by the state or territory. If we discover that a jurisdiction is including antigen tests in this metric, we will annotate that state or territory’s data accordingly.

**Total PCR tests (people)**

API field name: *totalTestsPeopleViral*

Total number of **unique people tested at least once via PCR testing**, as reported by the state or territory. The count for this metric is incremented up only the first time an individual person is tested and their result is reported. Future tests of the same person will not be added to this count.

In the case where the state only provides negative cases, this field is calculated as the **summation** of people who tested positive (“Positive Cases (People”) and the number of people who tested negative (“Negative (People or Cases)”). If we discover that a jurisdiction is including antigen tests in this metric, we will annotate that state or territory’s data accordingly.

**Total PCR tests (specimens)**

API field name: *totalTestsViral*

Total number of **PCR tests (or specimens tested)** as reported by the state or territory. The count for this metric is incremented up each time a specimen is tested and the result is reported. If we discover that a jurisdiction is including antigen tests in this metric, we will annotate that state or territory’s data accordingly. For states with ambiguous annotations, we have assigned their total tests to this category; these states and territories are identified in the new API field *covidTrackingProjectPreferredTotalTestUnits* as having “Unclear units.”

**Total PCR tests (test encounters)**

API field name: *totalTestEncountersViral*

Total number of **people tested *per day* via PCR testing** as reported by the state or territory. The count for this metric is incremented up by one for each day on which an individual person is tested, no matter how many specimens are collected from that person on that day. If an individual person is tested twice a day on three different days, this count will increment up by three. If we discover that a jurisdiction is including antigen tests in this metric, we will annotate that state or territory’s data accordingly.

**Antibody tests**

**Negative antibody tests (people)**

API field name: *negativeTestsPeopleAntibody*

The total number of **unique people with completed antibody tests that return negative** as reported by the state or territory.

**Negative antibody tests (specimens)**

API field name: *negativeTestsAntibody*

The total number of **completed antibody tests that return negative** as reported by the state or territory.

**Positive antibody tests (people)**

API field name: *positiveTestsPeopleAntibody*

The total number of **unique people with completed antibody tests that return positive** as reported by the state or territory.

**Positive antibody tests (specimens)**

API field name: *positiveTestsAntibody*

Total number of **completed antibody tests that return positive** as reported by the state or territory.

**Total antibody tests (people)**

API field name: *totalTestsPeopleAntibody*

The total number of **unique people who have been tested at least once via antibody testing** as reported by the state or territory.

**Total antibody tests (specimens)**

API field name: *totalTestsAntibody*

Total number of **completed antibody tests** as reported by the state or territory.

**Antigen tests**

**Positive antigen tests (people)**

API field name: *positiveTestsPeopleAntigen*

Total number of **unique people with a completed antigen test that returned positive** as reported by the state or territory.

**Positive antigen tests (specimens)**

API field name: *positiveTestsAntigen*

Total number of **completed antigen tests that return positive** as reported by the state or territory.

**Total antigen tests (people)**

API field name: *totalTestsPeopleAntigen*

Total number of **unique people who have been tested at least once via antigen testing**, as reported by the state or territory.

**Total antigen tests (specimens)**

API field name: *totalTestsAntigen*

Total number of **completed antigen tests**, as reported by the state or territory.

**Hospitalization**

**Cumulative hospitalized/Ever hospitalized**

API field name: *hospitalizedCumulative*

Total number of individuals who have **ever been hospitalized with COVID-19**. Definitions vary by state / territory, and it is not always clear whether pediatric patients are included in this metric. Where possible, we report patients hospitalized with confirmed or suspected COVID-19 cases.

**Cumulative in ICU/Ever in ICU**

API field name: *inIcuCumulative*

Total number of individuals who have **ever been hospitalized in the Intensive Care Unit with COVID-19**. Definitions vary by state / territory, and it is not always clear whether pediatric patients are included in this metric. Where possible, we report patients in the ICU with confirmed or suspected COVID-19 cases.

**Cumulative on ventilator/Ever on ventilator**

API field name: *onVentilatorCumulative*

Total number of individuals who have **ever been hospitalized under advanced ventilation with COVID-19**. Definitions vary by state / territory, and it is not always clear whether pediatric patients are included in this metric. Where possible, we report patients on ventilation with confirmed or suspected COVID-19 cases.

**Currently hospitalized/Now hospitalized**

API field name: *hospitalizedCurrently*

Individuals who are **currently hospitalized with COVID-19**. Definitions vary by state / territory, and it is not always clear whether pediatric patients are included in this metric. Where possible, we report patients hospitalized with confirmed or suspected COVID-19 cases.

**Currently in ICU/Now in ICU**

API field name: *inIcuCurrently*

Individuals who are **currently hospitalized in the Intensive Care Unit with COVID-19**. Definitions vary by state / territory, and it is not always clear whether pediatric patients are included in this metric. Where possible, we report patients in the ICU with confirmed or suspected COVID-19 cases.

**Currently on ventilator/Now on ventilator**

API field name: *onVentilatorCurrently*

Individuals who are **currently hospitalized under advanced ventilation with COVID-19**. Definitions vary by state / territory, and it is not always clear whether pediatric patients are included in this metric. Where possible, we report patients on ventilation with confirmed or suspected COVID-19 cases.

**New total hospitalizations**

API field name: *hospitalizedIncrease*

Daily increase in *hospitalizedCumulative*, calculated from the previous day’s value.

**Outcomes**

**Deaths (confirmed and probable)**

API field name: *death*

Total **fatalities with confirmed OR probable COVID-19 case diagnosis** (per the expanded [CSTE case definition](https://cdn.ymaws.com/www.cste.org/resource/resmgr/2020ps/Interim-20-ID-01_COVID-19.pdf) of April 5th, 2020 [approved by the CDC](https://wwwn.cdc.gov/nndss/conditions/coronavirus-disease-2019-covid-19/case-definition/2020/)). In some states, these individuals must also have COVID-19 listed on the death certificate to count as a COVID-19 death. When states post multiple numbers for fatalities, the metric includes only deaths with COVID-19 listed on the death certificate, unless deaths among cases is a more reliable metric in the state.

**Deaths (confirmed)**

API field name: *deathConfirmed*

Total **fatalities with confirmed COVID-19 case diagnosis** (per the expanded [CSTE case definition](https://cdn.ymaws.com/www.cste.org/resource/resmgr/2020ps/Interim-20-ID-01_COVID-19.pdf) of April 5th, 2020 [approved by the CDC](https://wwwn.cdc.gov/nndss/conditions/coronavirus-disease-2019-covid-19/case-definition/2020/)). In some states, these individuals must also have COVID-19 listed on the death certificate to count as a COVID-19 death. When states post multiple numbers for confirmed fatalities, the metric includes only lab-confirmed deaths with COVID-19 listed on the death certificate, unless deaths among confirmed cases is a more reliable metric in the state.

**Deaths (probable)**

API field name: *deathProbable*

Total **fatalities with probable COVID-19 case diagnosis** (per the expanded [CSTE case definition](https://cdn.ymaws.com/www.cste.org/resource/resmgr/2020ps/Interim-20-ID-01_COVID-19.pdf) of April 5th, 2020 [approved by the CDC](https://wwwn.cdc.gov/nndss/conditions/coronavirus-disease-2019-covid-19/case-definition/2020/)). In some states, these individuals must also have COVID-19 listed on the death certificate to count as a COVID-19 death. When states post multiple numbers for probable fatalities, the metric includes only probable fatalities with COVID-19 listed on the death certificate, unless deaths among probable cases is a more reliable metric in the state.

**New deaths**

API field name: *deathIncrease*

Daily increase in death, calculated from the previous day’s value.

**Recovered**

API field name: *recovered*

Total number of **people that are identified as recovered from COVID-19**. States provide very disparate definitions on what constitutes a “recovered” COVID-19 case. Types of “recovered” cases include those who are discharged from hospitals, released from isolation after meeting CDC guidance on [symptoms cessation](https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html), or those who have not been identified as fatalities after a number of days (30 or more) post disease onset. Specifics vary for each state or territory.

**State metadata**

**COVID Tracking Project preferred total test field**

API field name: *covidTrackingProjectPreferredTotalTestField*

Locator field that explains which API fields The COVID Tracking Project prefers for each state’s “New tests” chart and on the state’s history page on our website. Selects from the following options in order of priority: *totalTestEncountersViral*, *totalTestsViral*, *totalTestsPeopleViral*, or—where those units are all missing a sufficient time series—*totalTestResults*.

**COVID Tracking Project preferred total test units**

API field name: *covidTrackingProjectPreferredTotalTestUnits*

Label indicating which units The COVID Tracking Project prefers for each state’s “New tests” chart and on the state’s history page on our website. Selects from the following options in order of priority: test encounters, specimens, people, or—where those units are all missing a sufficent time series—negatives plus positives.

**Data Quality Grade**

API field name: *dataQualityGrade*

The COVID Tracking Project grade of the completeness of the data reporting by a state. See our [State Grades page](https://covidtracking.com/about-data/state-grades) and our [spreadsheet of grade factors](https://docs.google.com/spreadsheets/u/1/d/e/2PACX-1vRL2zG1o-qj9l2sl19d1lj1oHd6WbkJ0ukFwN04a_ms_ANUdgxTMpI7AF-gbQzwOSreJUDx6PEK7Vnq/pubhtml) for more information.

**Date**

API field name: *date*

Date on which data was collected by The COVID Tracking Project.

**Last Update (ET)**

API field name: *lastUpdateEt*

Date and time in Eastern time the state or territory last updated the data.

**New tests**

API field name: *totalTestResultsIncrease*

Daily increase in *totalTestResults*, calculated from the previous day’s value. This calculation includes all the caveats associated with Total tests/*totalTestResults*, and we recommend against using it at the state/territory level.

**State (or territory)**

API field name: *state*

Two-letter abbreviation for the state or territory.

**States**

API field name: *states*

Only available in national records. The number of states and territories included in the US dataset for this day.

**Total test results**

API field name: *totalTestResults*

At the national level, this metric is a summary statistic which—because it sums figures from states reporting tests in **test encounters** with those reporting tests in **specimens** and in **people**—is an aggregate calculation of heterogeneous figures. Therefore, it should be contextualized as, at best, an estimate of national testing performance.

In most states, the totalTestResults field is currently computed by adding positive and negative values because, historically, some states do not report totals, and to work around different reporting cadences for cases and tests. In Colorado, Delaware, the District of Columbia, Florida, Hawaii, Minnesota, Nevada, New York, North Dakota, Rhode Island, Virginia, Washington, and Wisconsin, where reliable testing encounters figures are available with a complete time series, we directly report those figures in this field. In Alaska, America Samoa, Arizona, Arkansas, California, Georgia, Indiana, Kentucky, Maryland, Massachusetts, Missouri, Nebraska, New Hampshire, Oregon, Texas, Utah, Vermont, and Wyoming, where reliable specimens figures are available with a complete time series, we directly report those figures in this field. In Alabama, Idaho, and South Dakota, where reliable unique people figures are available with a complete time series, we directly report those figures in this field. We are in the process of switching all states over to use directly reported total figures, using a policy of preferring testing encounters, specimens, and people, in that order.