

## Coronavirus Disease 2019 (COVID-19)

# FAQ: COVID-19 Data and Surveillance

Frequently Asked Questions Updated April 17, 2020

### General

### How does CDC collect COVID-19 surveillance data?

Public health surveillance is the ongoing, systematic collection, analysis, and interpretation of health-related data essential to planning, implementation, and evaluation of public health practice.

For surveillance of COVID-19, and the virus that causes it, SARS-COV-2, CDC is using multiple surveillance systems run in collaboration with state, local, territorial, and academic partners to monitor COVID-19 disease in the United States. COVID-19 surveillance draws from a combination of data sources from existing influenza and viral respiratory disease surveillance, syndromic surveillance, case reporting, commercial lab reporting, the healthcare safety system, ongoing research platforms, and other new systems designed to answer specific questions. These systems, combined, create an updated, accurate picture of SARS-COV-2 spread and its effects in the United States and provide data used to inform the U.S. national public health response to COVID-19.

### What are the goals for COVID-19 national surveillance?

- To monitor spread and intensity of COVID-19 disease in the United States
- To understand disease severity and the spectrum of illness
- To understand risk factors for severe disease and transmission
- To monitor for changes in the virus that causes COVID-19
- To estimate disease burden
- To produce data for forecasting COVID-19 spread and impact
- To understand how COVID-19 impacts the capacity of the U.S. healthcare system (e.g., availability and shortages of key resources)

### How are COVID-19 data used?

COVID-19 data can be used to help public health professionals and health care providers monitor the spread of COVID-19 in the United States and support better understanding of U.S. illness, disease severity, and social disruptions associated with COVID-19. These data help inform the U.S. national public health response to COVID-19.

### Understanding the Data

What is a COVID-19 case?

CDC U.S. COVID-19 case counts and death counts include both confirmed and probable cases and deaths. This change was made to reflect an interim COVID-19 position statement [In Pages, 251 KB] [In Pages, 251 KB] [In Pages] for State and Territorial Epidemiologists on April 5, 2020. The position statement included a case definition and made COVID-19 a nationally notifiable disease.

### What is a COVID-19 probable case?

A probable case or death is defined by

- Meeting clinical criteria AND epidemiologic evidence with no confirmatory laboratory testing performed for COVID-19; or
- Meeting presumptive laboratory evidence AND either clinical criteria OR epidemiologic evidence; or
- Meeting vital records criteria with no confirmatory laboratory testing performed for COVID-19.

### Why do the number of cases for previous days increase?

Delays in reporting can cause the number of COVID-19 cases reported on previous days to increase. (Sometimes this effect is described as "backfill.") State, local, and territorial health departments report the number of cases that have been confirmed and share these data with CDC. Since it takes time to conduct laboratory testing, cases from a previous day may be added to the daily counts a few days late.

#### Why are we seeing a rise in cases?

The growing number of cases reflects the rapid spread of COVID-19 as many U.S. states and territories experience community spread. Also, the number of cases of COVID-19 being reported in the United States is rising due to increased laboratory testing and reporting across the country. More detailed and accurate data will allow us to better understand and track the size and scope of the outbreak and strengthen prevention and response efforts.

### What numbers are reported for laboratory testing?

CDC updates information on laboratory testing from multiple sources. This includes testing results from state, local and territorial public health departments, CDC and commercial laboratories.

## Why are the death counts for the Case in the U.S. different from the Provisional Death Counts for COVID-19 and pneumonia?

The COVID-19 death count shown on the Cases in the U.S. web page includes deaths reported daily by state, local, and territorial health departments. This count reflects the most real-time information CDC has based on preliminary reporting from health departments.

In contrast, provisional COVID-19 death counts from the National Center for Health Statistics (NCHS) are updated Monday-Friday based on information collected from death certificates. These data represent the most accurate death counts. However, because it can take several weeks for death certificates to be submitted and processed, these data currently are lagged by an average of 1–2 weeks and may not include all deaths that occurred during a given time period, especially for more recent periods. Death counts from earlier weeks are continually revised and may increase or decrease as new and updated death certificate data are received. Provisional COVID-19 death counts may therefore differ from other published sources, such as media reports or the Cases in the U.S. web page.

### What does the mortality rate mean? Why does this percentage keep changing?

The mortality rate is the percentage of people who died out of the total number of cases reported. Since this is an ongoing outbreak, the percentage might change daily. There are several reasons for this, such as there may be delays in reporting of additional confirmed cases and not all cases will be detected.

## Why do some case numbers reported by state health departments, Johns Hopkins, or World Health Organization (WHO) sometimes differ from what is posted on CDC's website?

### Surveillance Reports

#### Are there surveillance reports created by CDC on COVID-19?

Yes, CDC is modifying existing surveillance systems to track COVID-19. On April 3 we posted the first of what will be a weekly surveillance report called, "COVIDView." The report, updated each Friday, will summarize and interpret key indicators, including information related to COVID-19 outpatient visits, emergency department visits, hospitalizations and deaths, as well as laboratory data.

As part of our weekly reporting, CDC has data on hospitalization rates and demographics as part of its COVID-NET surveillance system.

- Additional rate data
- Additional demographic and clinical data

COVID-19 surveillance data is also used to produce publications. Many of these reports can be found online through CDC's *Morbidity and Mortality Weekly Report (MMWR)*. COVID-19 data are also used to inform guidance documents.

### CDC COVID Data Tracker

### What is CDC COVID Data Tracker?

CDC COVID Data Tracker is a website that allows users to interact with a variety of data on COVID-19 that is updated daily. The website builds on other agency efforts – such as CDC's new weekly COVID-19 Surveillance report, COVIDView – to capture the impact the virus is having on the United States. CDC COVID Data Tracker presents data using visual dashboards that include interactive maps, graphs and other visuals. It is being developed in phases. The first phase showcases data on U.S. cases and deaths of COVID-19 and social impacts of COVID-19 disease.

### How often is CDC COVID Data Tracker updated?

CDC COVID Data Tracker is updated daily. Specifics of data reporting are described as a footnote on each page.

### What kinds of data does CDC COVID Data Tracker track and how are these data displayed?

Upon its launch on April 17, 2020, CDC COVID Data Tracker users will be able to track the following data daily: U.S. cases and deaths of COVID-19 and social impacts of COVID-19 disease. CDC COVID Data Tracker displays these data using visual dashboards that include interactive maps, charts and other visuals. The data and information provided by COVID Data Tracker will be expanded over time.

# The following data and information are currently planned for inclusion in COVID Data Tracker in future phases:

- Laboratory tests performed by U.S. commercial, public health and CDC laboratories.
- School closures in the United States due to COVID-19 (i.e., includes information on planned dates of reopening and the percentage of school districts to remain closed over time includes time projections for schools remaining closed, such as 7 days, 14 days, 21 days and 1 month)
- Laboratory tests performed and the percentage positive by U.S. Public Health Laboratories
- Trends in U.S. COVID-19 cases by jurisdiction, including case information over time and by age group and sex.
- Syndromic Surveillance (i.e., trends in emergency department visits based on influenza-like-illness and Covid-19-like illness surveillance)
- Global COVID-19 cases based on data provided by the World Health Organization (WHO)
- Global COVID-19 case trends (based on WHO data)

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