Coronavirus Disease 2019 (COVID-19)

FAQ: COVID-19 Data and Surveillance

Frequently Asked Questions

Updated June 3, 2020

CDC COVID-19 Surveillance

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 in collaboration with state, local, territorial, academic, and commercial partners to monitor COVID-19 in the United States. COVID-19 surveillance draws from a combination of data sources using existing influenza and viral respiratory disease surveillance, syndromic surveillance, case reporting, lab reporting, the healthcare safety system, ongoing research platforms, and other new surveillance systems designed to answer specific questions. The data from these systems, combined, create an updated picture of COVID-19's spread and its effects in the United States and are 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 of COVID-19 in the United States
- To understand disease severity and the spectrum of illness due to COVID-19
- To understand risk factors for severe disease and transmission of COVID-19
- To monitor for changes in the virus that causes COVID-19
- To estimate disease burden due to COVID-19
- To produce data for forecasting COVID-19's spread and impact
- To understand how COVID-19 impacts the capacity of the U.S. healthcare system (for example, availability and shortages of key resources)

How are COVID-19 data used? −

COVID-19 data can be used to help public health professionals, policy makers, and health care providers monitor the spread of COVID-19 in the United States and support better understanding of illness, disease severity, effectiveness of community interventions, and social disruptions associated with COVID-19 in the U.S.. These data help inform U.S. national, state, local, tribal, and territorial public health responses to COVID-19.

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.

Where can I find information on COVID-19 cases, testing, hospitalizations, deaths, and other surveillance in the United States? −

CDC provides this information on the Cases, Data, & Surveillance webpage:

- **Cases in the U.S.**
  - Cases reported in the U.S. so far (and new cases reported in the past day)
  - Deaths reported in the U.S. so far (and new deaths reported in the past day)
- **Cases & Deaths by County**
  - Reported deaths by county in the U.S. so far (and new deaths reported in the past day)
- **COVIDView: A Weekly Surveillance Summary of COVID-19 Activity**
  - Key updates for the week (trends in laboratory testing, outpatient and emergency department visits, hospitalizations, and deaths)
  - U.S. Virologic Surveillance (national percentage of respiratory specimens testing positive for SARS-CoV-2 at public health, clinical, and commercial laboratories)
  - Outpatient and emergency department visits
  - Cumulative COVID-19-associated hospitalization rates and patient characteristics (age, race/ethnicity, and underlying medical conditions)
  - National percentage of deaths attributed to pneumonia, influenza, or COVID-19
- **CDC COVID Data Tracker**
  - U.S. COVID-19 cases and deaths by state/territory (counts, rates, and deaths by age group and sex)
  - U.S. laboratory testing for COVID-19
  - U.S. COVID-19 cases and deaths by county
  - Social impact COVID-19 events by state (for example, school closures, localized outbreaks, and state of emergency declarations)
  - Human mobility and transmission by state, county, and county classification (workplace, retail and recreation, transit station, and at home mobility tracking)
- **Hospitalization Surveillance Network (COVID-NET)**
  - National hospitalization rates for COVID-19
  - Characteristics of people hospitalized with COVID-19 in the U.S.
- **COVID-19 Serology Surveillance**
  - Information on large-scale geographic, community-level, and special populations seroprevalence surveys (Results from these surveys will be posted as they become available.)
- **COVID-19 Data from the National Center for Health Statistics (NCHS)**
  - National Vital Statistic System's provisional death counts

- Data on mental health and access to healthcare from the NCHS partnership with the U.S. Census Bureau on the Household Pulse Survey (includes indicators of anxiety and depression based on reported frequency of symptoms during the last 7 days)

- **Testing Data in the U.S.**
  - Number of tests (viral and antibody) conducted and positive tests reported in the U.S.
- **Patient Impact and Hospital Capacity Pathway**
  - Estimated percentage of inpatient beds occupied by all patients, by state
  - Estimated percentage of inpatient beds occupied by COVID-19 patients, by state
  - Estimated percentage of ICU beds occupied by all patients, by state

Understanding the Data

What is a COVID-19 case?   —

A COVID-19 case includes confirmed and probable cases and deaths. This change was made to reflect an interim COVID-19 position 🅿 ↗ statement issued by the Council of 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 as:

- A person meeting clinical criteria **AND** epidemiologic evidence with no confirmatory laboratory testing performed for COVID-19;
- A person meeting presumptive laboratory evidence **AND** either clinical criteria **OR** epidemiologic evidence;
- A person meeting vital records criteria with no confirmatory laboratory testing performed for COVID-19.

Why are we seeing a rise in cases?   —

The rise in the number of COVID-19 cases reflects the rapid community spread of COVID-19 in many U.S. states, territories and communities. Community spread means people have been infected with the virus in an area, including some who are not sure how or where they became infected. 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.

Why are the death counts for the Cases in the U.S. webpage different from the Provisional Death Counts for COVID-19 webpage?

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 up-to-date information received by CDC 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 through Friday with 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, there is on average a delay of 1–2 weeks before they are reported. Therefore, the provisional death counts 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 those on 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 due to COVID-19 out of the total number of people with COVID-19 reported. Since this is an ongoing outbreak, the percentage can change daily. There are several reasons for this, such as there may be delays in reporting of additional confirmed cases of COVID-19 and not all COVID-19 cases will be detected.

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

CDC's overall case numbers are validated through a confirmation process with jurisdictions. The process used for finding and confirming cases displayed by different places may differ.

Case numbers reported on other websites may differ from what is posted on CDC's website because CDC's overall case numbers are validated through a confirmation process with each jurisdiction. Differences between reporting jurisdictions and CDC's website may occur due to the timing of reporting and website updates. The process used for finding and confirming cases displayed by other sites may differ.

Surveillance Reports

Does CDC create surveillance reports 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 test results.

In these weekly reports, CDC provides data on hospitalization rates and patient demographics as part of its COVID-NET surveillance system.

COVID-19 surveillance data are also used to produce publications, including CDC's *Morbidity and Mortality Weekly Report (MMWR)*, and to inform guidance documents to protect people from COVID-19 in a variety of settings.

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 and graphs. It is being developed in phases. The first phase showcases data on U.S. COVID-19 cases and deaths as well as the social impacts of COVID-19.

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?   −

CDC COVID Data Tracker users can track the following data daily:

- U.S. cases and deaths of COVID-19 and the impacts of COVID-19.
- Trends in U.S. COVID-19 cases by jurisdiction, including case information over time and by age group and sex.
- Laboratory tests performed by U.S. commercial, hospital, public health, and CDC laboratories and the percentage of positive test results.
- School closures in the United States due to COVID-19, including information on planned dates of reopening, the percentage of school districts to remain closed over time, and projections for how long schools may remain closed (7 days, 14 days, 21 days, and 1 month)
- Impact of COVID-19 events, which includes news reports related to social impact events resulting from the COVID-19 outbreak in the United States, such as school closures, localized outbreaks, and state of emergency declarations.
- Mobility data from local areas including information on mobility data in the workplace, retail and recreation, transit station, and people staying at home.

CDC COVID Data Tracker displays these data using visual dashboards that include interactive maps and graphics. 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: _

- Syndromic surveillance showing trends in emergency department visits based on influenza-like-illness and COVID-19-like illness
- Global COVID-19 cases based on data provided by the World Health Organization (WHO)
- Global COVID-19 case trends based on WHO data