



Monitoring COVID-19 Cases, Hospitalizations, and Deaths by Vaccination Status

Updated June 23, 2022

CDC uses public health surveillance data reported by participating health departments, hospitals, and long-term care facilities to **monitor rates of COVID-19 cases, hospitalizations, and deaths by vaccination status**.

Monitoring rates of COVID-19 cases, hospitalizations, and deaths by vaccination status over time, as well as by age and vaccine type, can help identify **overall patterns or trends**.

This information can provide signals of potential changes in vaccine effectiveness that can be further studied through more robust, controlled [vaccine effectiveness studies](#), which are ongoing at CDC.



CDC analyzes surveillance data by vaccination status to

- Better understand patterns of COVID-19 among people who are vaccinated and unvaccinated.
- Identify signals of potential changes in vaccine effectiveness, which can be confirmed through more robust studies.

CDC uses the following platforms and methods to collect and analyze surveillance data on COVID-19 cases, hospitalizations, and deaths by vaccination status:

Case surveillance

CDC collaborates with more than 30 state and local health departments that routinely link case surveillance, immunization registry, and vital registration data to monitor rates of COVID-19 cases and deaths by vaccination status, including receipt of booster doses. These rates are published monthly on [COVID Data Tracker](#).

Data from the participating health departments represent more than 70% of the U.S. population and all regions of the country. The volume of this data allows CDC to analyze rare outcomes over time, like COVID-19-associated deaths. However, while these analyses can provide signals of potential changes in vaccine effectiveness, they cannot control for some variables that could impact the results – for example, underlying medical conditions from prior infection.

COVID-NET

CDC monitors rates of COVID-19 hospitalizations by vaccination status using [COVID-NET](#). COVID-NET is a population-based, sentinel surveillance system that collects reports of laboratory-confirmed COVID-19-associated hospitalizations in 99 counties in 14 states. COVID-NET covers approximately 10% of the U.S. population.

CDC publishes weekly rates of laboratory-confirmed COVID-19 hospitalizations by vaccination status on [COVID Data Tracker](#). The data is updated monthly.

National Healthcare Safety Network

Infections in long-term care facility residents by vaccination status are reported through a network of approximately 15,000 medical facilities called the [National Healthcare Safety Network \(NHSN\)](#). An analysis of this data was published in [CDC's MMWR](#).

Related Pages

- › [Vaccine Breakthrough Infections: The Possibility of Getting COVID-19 after Getting Vaccinated](#)
- › [COVID-19 Vaccine Breakthrough Case Investigation and Reporting](#)
- › [Cases and Deaths by Vaccination Status](#)
- › [Hospitalizations by Vaccination Status](#)
- › [CDC's MMWR: Published analyses of case surveillance data by vaccination status for periods of Delta variant and Omicron variant](#)

Last Updated June 23, 2022