

In-hospital Mortality Among Hospital Confirmed COVID-19 Encounters by Week From Selected Hospitals

COVID-19 Hospital Data

The National Hospital Care Survey (NHCS), conducted by the National Center for Health Statistics (NCHS), collects data on patient care in hospital-based settings to describe patterns of health care delivery and utilization in the United States. Settings currently include inpatient facilities and emergency departments (ED). The survey collects electronic data, Uniform Bill (UB-04) administrative claims or electronic health records, for all encounters in a calendar year from a nationally representative sample of 608 hospitals. Information collected includes diagnoses, procedures, demographics, discharge status, and patient identifiers (e.g., name and date of birth). Eligible hospitals are in the 50 states and the District of Columbia and include noninstitutional, nonfederal hospitals with six or more staffed inpatient beds. Hospitals are currently being received into the survey.

The NHCS results provided on COVID-19 hospital use are from UB-04 administrative claims data from March 18, 2020 through September 28, 2021 from 41 hospitals that submitted inpatient data and 42 hospitals that submitted ED data. The data used in these figures are considered preliminary, and the results may change with subsequent releases. There will be updates every two months to the data file for the remaining months in 2021. The data are not nationally representative. Even though the data are not nationally representative, they can provide insight on the impact of COVID-19 on various types of hospitals throughout the country.

There are three sets of figures presented on this page, which show results related to in-hospital mortality for confirmed COVID-19 encounters, average length of stay, and intubation or ventilator use among COVID-19 in-hospital deaths.

COVID-19 Hospital Data

[COVID-19 hospital encounters by week](#)

[COVID-19 in hospitals by urban-rural location of the hospital by week](#)

[COVID-19 screenings at hospitals by week](#)

[Intubation or ventilator use in the hospital among confirmed COVID-19 inpatient discharges by week](#)

[In-hospital mortality among hospital confirmed COVID-19 encounters by week](#)

[Co-occurrence of other respiratory illnesses for hospital confirmed COVID-19 encounters by week](#)

The first set of figures shows the percentage of confirmed COVID-19 hospital encounters with a discharge status of in-hospital death. Data are presented for each setting (inpatient and ED) and for each week, by age and sex.

- A confirmed COVID-19 hospital encounter is defined as an any listed *International Classification of Diseases, 10th Revision, Clinical Modification* (ICD-10-CM) diagnosis code of B97.29 and/or U07.1. Prior to April 1, 2020, CDC guidance stated to code a confirmed COVID-19 hospital encounter as B97.29. On April 1, 2020, the guidance changed to code confirmed COVID-19 hospital encounters as U07.1.
- An in-hospital death is defined by an encounter with a discharge status of died or died in a medical facility.

Percentage of confirmed COVID-19 encounters that died in the hospital from selected hospitals, by week



NOTE: Data are not nationally representative.

SOURCE: National Center for Health Statistics, National Hospital Care Survey, 2020-2021

Microsoft Power BI

Pages



[Access Dataset on Data.CDC.gov \(Export to CSV, JSON, XLS, XML\)](#)^[7]

- 88,388 ED confirmed COVID-19 encounters and 65,477 inpatient confirmed COVID-19 discharges.
- For weeks where there are less than 30 encounters in the denominator, data are suppressed. In the figure, weeks with suppressed data do not have a corresponding data point on the indicator line.

The second set of figures shows the percentage of intubation or ventilator use among confirmed COVID-19 inpatient discharges with a discharge status of in-hospital death. Weekly data are presented for the inpatient setting by sex. Intubation or ventilator use is defined by one or both of the following:

- Ventilator use as defined by any listed *International Classification of Diseases, 10th Revision, Procedure Coding System* (ICD-10-PCS) procedure codes: 5A19054, 5A1935Z, 5A1945Z, or 5A1955Z.
- Emergency endotracheal intubation as defined by any listed Current Procedural Terminology (CPT) procedure code 31500.

[Access Dataset on Data.CDC.gov \(Export to CSV, JSON, XLS, XML\)](#)^[7]

- 8,458 inpatient discharges with a discharge status of died in the hospital.
- For weeks where there are less than 30 encounters in the denominator, data are suppressed. In the figure, weeks with suppressed data do not have a corresponding data point on the indicator line.

The third set of figures shows the average length of stay for confirmed COVID-19 inpatient discharges, by intubation or ventilator use and in-hospital mortality status. Weekly data are presented for both figures.


[Access Dataset on Data.CDC.gov \(Export to CSV, JSON, XLS, XML\)](#)^[7]

- 62,500 inpatient confirmed COVID-19 discharges.
 - For weeks where there are less than 30 encounters in the denominator, data are suppressed. In the figure, weeks with suppressed data do not have a corresponding data point on the indicator line.
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Technical Notes





- Data are not nationally representative.
- Less than 1% of all encounters were excluded due to missing discharge status, sex, age, or a diagnosis.
- Hospitalizations related to childbirth are included in the denominator for females.
- 10.1% of inpatient discharges were for newborn (ICD-10-CM: Z38) encounters and are excluded.
- Data represent encounters, not patients.
- Weeks with less than 30 encounters in the denominator are suppressed.

Data Source

The data presented are from the 2020 and 2021 NHCS. The data in these figures are considered preliminary and are not nationally representative. All estimates shown meet the [NCHS Data Presentation Standards for Proportions](#)  [PDF – 1 MB].

The goal of NHCS is to produce national estimates on hospital care and utilization. The survey is designed to produce objective and timely data to assess the health and well-being of the population and the performance and functioning of the health care system. For more details about NHCS, visit the [National Hospital Care Survey website](#).

Related Links

- [ICD-10-CM Official Coding and Reporting Guidelines April 1, 2020 through September 30, 2020](#) 
- [New ICD-10-CM code for COVID-19, December 3, 2020](#) 
- [ICD-10-CM Official Coding Guidelines – Supplement Coding Encounters related to COVID-19 Coronavirus Outbreak Effective: February 20, 2020](#) 
- [ICD-10-CM Official Guidelines for Coding and Reporting FY 2021](#) 

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