

The National Healthcare Safety Network (NHSN) Manual

COVID-19 VACCINATION PROTOCOL

Weekly COVID-19 Vaccination Modules for Long-term Care Facility Residents and Dialysis Patients

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1. Introduction to the Weekly COVID-19 Vaccination Modules

Background: The Weekly COVID-19 Vaccination Modules were launched in December 2020. Long-term care facilities report COVID-19 vaccination data on residents through the Long-term Care Facility Component. Dialysis facilities report COVID-19 vaccination data on patients through the Dialysis Component.

Objectives: The Weekly COVID-19 Vaccination Modules are designed to ensure that reporting of COVID-19 vaccination data is both consistent over time within a single healthcare facility and comparable across facilities. Various healthcare facilities will benefit by receiving technical support and standardized methodologies, including a Web-based application, for conducting vaccination surveillance activities. Using NHSN to monitor COVID-19 vaccination may also result in increased COVID-19 vaccination coverage, because improvements in tracking and reporting vaccination status will allow facilities to better identify and target unvaccinated persons.

By using NHSN, vaccination coverage data can be made available to authorities at the local and national levels to identify coverage gaps. The data can also be combined with data on infection rates to inform infection control policies and recommendations.

2. Monthly Reporting Plan for the COVID-19 Vaccination Modules

Long-term Care Facility Component

The Monthly Reporting Plan for Long-term Care Facilities (LTCF) [CDC 57.141] collects data on healthcare associated infections, LabID events, prevention process measures, and COVID-19 vaccination data. When creating a plan for reporting COVID-19 vaccination summary data for residents in the Weekly COVID-19 Vaccination Module of the Long-term Care Facility Component, facilities complete a plan for each month COVID-19 vaccination summary data are entered into NHSN. The *Instructions for Completion of the Monthly Reporting Plan for LTCF form* includes brief instructions for collection and entry of each data element on the form.

Please note that dialysis facilities are not required to complete a monthly reporting plan before entering weekly COVID-19 vaccination data in NHSN for dialysis patients through the Dialysis Component.

3. COVID-19 Vaccination Coverage among Long-term Care Facility Residents and Dialysis Patients

Background

In 2020, the spread of the COVID-19 (Severe Acute Respiratory Syndrome Coronavirus-2) virus caused COVID-19 disease and became a global pandemic. In response, COVID-19 vaccines were introduced in December 2020. The NHSN COVID-19 Vaccination Cumulative Summary Modules were developed to collect data on COVID-19 vaccination coverage among certain populations, such as long-term care facility (LTCF) residents and dialysis patients in the United States.

Settings

Long-term care facilities and outpatient dialysis centers are invited to join NHSN and report COVID-19 vaccination data.

Requirements

Participating facilities are required to report data according to this protocol, using the NHSN definitions described herein, to ensure data are uniformly reported across facilities. Within the LTCF Component, monthly reporting plans must be created or updated to include COVID-19 vaccination data summary reporting.

CDC/NHSN encourages that COVID-19 vaccination summary data be updated on a weekly basis, so they have the greatest impact on COVID-19 vaccination activities.

Reporting Instructions

Forms, Description, and Purpose

All facilities reporting COVID-19 vaccination data must complete the following monthly reporting plan and data collection forms.

Monthly Reporting Plans

- *Monthly Reporting Plan for LTCFs (CDC 57.141)*
 - This form collects data on which modules and months (if any) the facility intends to participate. When creating a plan for reporting COVID-19 vaccination summary data for residents in the Weekly COVID-19 Vaccination Modules, facilities complete a plan for each month COVID-19 vaccination summary data are entered into NHSN.

Data Collection Forms

- *Weekly COVID-19 Vaccination Cumulative Summary for Residents of LTCFs (CDC 57.218)*
 - This is used to collect data on summary COVID-19 vaccination counts among residents of LTCFs. Facilities can enter data each week, defined as Monday through Sunday. Facilities can also edit and update data after the initial data entry. When entering data, all required fields indicated with an asterisk must be completed. Otherwise, the data cannot be saved. Users should enter “0” in a field if no residents at the facility fall into that category.

- *Weekly COVID-19 Vaccination Cumulative Summary for Dialysis Patients (CDC 57.509)*
 - This is used to collect data on summary COVID-19 vaccination counts among patients of dialysis facilities. Facilities can enter data each week, defined as Wednesday through Tuesday. Facilities can also edit and update data after the initial data entry. When entering data, all required fields indicated with an asterisk must be completed. Otherwise, the data cannot be saved. Users should enter “0” in a field if no patients at the facility fall into that category.

Denominator Categories

For LTCF residents, the denominator is defined as the total number of residents occupying a bed at this facility for at least one day (at least 24 hours) during the week of data collection. Each person should be counted only once in the denominator. Residents not yet eligible to receive COVID-19 vaccination due to age should be excluded from the denominator.

For dialysis patients, the denominator is defined as the total number of patients receiving dialysis care from the facility during the week of reporting, whether care was provided in-center or through home dialysis. Facilities have the option of reporting vaccination data on patients by the type of dialysis care received (in-center versus home dialysis). If entered, the categories for patients receiving different types of dialysis care should be mutually exclusive. For patients receiving more than one type of dialysis care during the week of data collection, facilities should classify the patient according to the type of dialysis care they received first. Each patient should be counted only once in the denominator. Patients not yet eligible to receive COVID-19 vaccination due to age should be excluded from the denominator.

Numerator Categories

Individuals should be counted as vaccinated if they received COVID-19 vaccination any time from when it first became available in December 2020. A completed vaccination course may require one or more doses depending on the specific vaccine used. Vaccination coverage is defined as a measure of the estimated percentage of people in a sample or population who received a specific vaccine or vaccines. For more information on who is considered fully vaccinated please visit: <https://www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html>.

Facilities are required to complete the following numerator fields in the NHSN application:

- a. received a completed COVID-19 vaccination course administered at the healthcare facility; or reported in writing (paper or electronic) or provided documentation that a completed COVID-19 vaccination course was received elsewhere; or
- b. were determined to have a medical contraindication, defined as: severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a component of the COVID-19 vaccine or an immediate allergic reaction of any severity to a previous dose or known (diagnosed) allergy to a component of the vaccine
- c. were offered but declined COVID-19 vaccination; or
- d. had an unknown vaccination status or did not otherwise meet any of the definitions of the other numerator categories.

Numerator Notes

1. Persons who received vaccination outside of the facility but did not provide written documentation should be categorized as having unknown vaccination status.
2. Persons who declined vaccination because of conditions other than those specified in category (b) above should be categorized as declined vaccination.*
3. Persons who declined vaccination and did not provide any other information should be categorized as declined vaccination.
4. Persons who did not receive vaccination because of religious or philosophical exemptions should be categorized as declined vaccination.
5. For surveillance purposes, facilities are required to enter data in the NHSN application on the number of individuals who have received an additional or booster dose of the COVID-19 vaccine.
6. Facilities should report cumulative data. This cumulative count should include all individuals who were ever vaccinated (since December 2020) and not just those individuals vaccinated during the current reporting week.

***Note:** For the purposes of these modules, a medical contraindication to vaccination is defined as having a severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a component of the COVID-19 vaccine or an immediate allergic reaction of any severity to a previous dose or known (diagnosed) allergy to a component of the vaccine. A healthcare facility may grant medical exemptions to individuals with other conditions besides those defined for these modules and may include these conditions in its list of acceptable medical contraindications to COVID-19 vaccination. However, to ensure that data are comparable across different facilities reporting data

using these modules, only those individuals with one of the two conditions stated above should be reported to NHSN as having a medical contraindication to COVID-19 vaccination.

Data Sources

Data sources for the required data elements include medical or occupational health records (e.g., electronic health data) vaccination records, claims, instrument-based data, and immunization tracking. Individuals can self-report in writing (paper or electronic) that the vaccination was received elsewhere or provide documentation of receipt of the COVID-19 vaccine elsewhere. Documentation should include the date and location of vaccine receipt and vaccine type. For these reporting modules, verbal statements are not acceptable proof of vaccination outside the facility. However, individuals can provide verbal statements for medical contraindications to and declination of the COVID-19 vaccine, as written documentation is not required for NHSN reporting.

Methodology

The COVID-19 vaccination summary data reporting enables a healthcare facility to record weekly COVID-19 vaccination data for LTCF residents and dialysis patients. Data must be entered for the denominator categories and the four numerator fields describing vaccination status.

These modules require that data be collected as per CDC reporting requirements. Facilities can select the week for which they would like to report data. Any new data that are entered into NHSN will overwrite previously entered data.

Data Analyses

Vaccination coverage is defined as a measure of the estimated percentage of people in a sample or population who received a specific vaccine or vaccines. For more information on who is considered fully vaccinated please visit: <https://www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html>.

The COVID-19 vaccination coverage rate is calculated using the following formula:

$$\frac{\text{\# Cumulative total of individuals vaccinated}}{\text{\# Individuals at the facility (excluding contraindications)}} \times 100 = \text{Pct. of individuals vaccinated}$$

Note that the analysis reports available in NHSN include several rate calculations in addition to this primary measure of vaccination coverage.

4. Key Terms

Key term	Definition for purposes of the COVID-19 Vaccination Summary Modules
Cumulative data	Cumulative data account for all individuals eligible to work at the facility and who were ever vaccinated (not just those individuals vaccinated during the current reporting week).
In-center dialysis patient	A patient receiving dialysis services at the facility.
Home dialysis patient	A patient receiving dialysis services (including hemodialysis and peritoneal dialysis) at home.
Resident	An individual occupying a bed at a long-term care facility for at least 1 day (at least 24 hours) during the week of data collection.