



The National Healthcare Safety Network (NHSN) Manual

2023 COVID-19/RESPIRATORY PATHOGENS VACCINATION PROTOCOL

Weekly Vaccination Modules for Long-term Care Facility Residents

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1. Introduction to the Weekly Vaccination Modules

Background: The Weekly COVID-19 Vaccination Module was launched in December 2020. Long-term care facilities report COVID-19 vaccination data on residents through the Long-term Care Facility (LTCF) Component. Person level COVID-19 Vaccination Reporting for LTCF Residents was introduced in March of 2022. In October 2023, NHSN weekly vaccination surveillance was expanded to include optional reporting of vaccination against Influenza and Respiratory Syncytial Virus (RSV).

Objectives: The Weekly Vaccination Modules are designed to ensure that reporting of vaccination data is both consistent over time within a single healthcare facility and comparable across facilities. Using these modules enables facilities to collect, track and report data on vaccination against respiratory pathogens on a weekly basis. Data can be submitted manually or via .CSV upload. LTCFs have the additional option to use the Person-Level COVID-19 Vaccination Forms to report data to the main weekly healthcare personnel and resident vaccination modules.

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 vaccination against respiratory pathogens may also result in increased vaccination against COVID-19, Influenza, and RSV, 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 Plans for the Vaccination Modules

COVID-19 Vaccination Reporting

As of June 2022, a monthly reporting plan for COVID-19 vaccination data is no longer required. Instead, upon saving or uploading data, users agree to the following:

- a. The data reported are consistent with definitions outlined in NHSN surveillance protocols (including tables of instructions and frequently asked questions).
- b. The data will be sent to the Centers for Medicare and Medicaid Services (CMS) to fulfill CMS quality reporting requirements (when applicable).

For reporting weeks during October 2021 through May 2022, the Monthly Reporting Plan for LTCFs [CDC 57.141] collects data on 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 LTCF Component, facilities complete a plan for each month COVID-19 vaccination summary data are entered into NHSN for weeks during October 2021 through May 2022. [Instructions for Completion of Monthly Plan LTCF Form \(cdc.gov\)](https://www.cdc.gov/ncidod/dlqs/ltrc/57.141/) (CDC 57.141) includes brief instructions for how to complete the MRP.

Optional Influenza and RSV Vaccination Reporting

A monthly reporting plan for influenza and RSV vaccination data is not required. Instead, upon saving or uploading data, users agree to the following:

- a. The data reported are consistent with definitions outlined in NHSN surveillance protocols (including tables of instructions and frequently asked questions).



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

Background

In 2020, the Severe Acute Respiratory Syndrome Coronavirus-2 virus (the virus that causes COVID-19 disease) began spreading globally and became a 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 in the United States.

Settings

Long-term care facilities may enroll in NHSN and report COVID-19 vaccination data through the LTC Component.

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 for weeks during October 2021 through May 2022. After May 2022, a monthly reporting plan is no longer required to enter resident COVID-19 vaccination summary data.

CDC/NHSN encourages facilities to update COVID-19 vaccination summary data on a weekly basis, so they have the greatest impact on COVID-19 vaccination activities. The week-end date determines which month a week is included in. For example, reporting data for the week of January 31 through February 6 is considered as submitting data for a week in February, not January. This is because the week-end date (February 6) is in February.

Reporting Instructions

Forms, Description, and Purpose

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

Monthly Reporting Plans (for weeks during October 2021 through May 2022)

- *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.

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.

Numerator Categories

Individuals should be counted as vaccinated for COVID-19 if they received COVID-19 vaccination any time from when it first became available in December 2020. A completed primary series vaccination course may require one or more doses depending on the specific vaccine used.

A resident is counted as having up-to-date vaccination status if they have received the most recent COVID-19 vaccine(s) recommended for them. Please see the following document for more information: <https://www.cdc.gov/nhsn/pdfs/hps/covidvax/UpToDateGuidance-508.pdf>.

Facilities are required to complete the following numerator fields in the NHSN application as of June 26, 2023:

- a. received the most recent up-to-date COVID-19 vaccination administered at the healthcare facility; or reported in writing (paper or electronic) or provided documentation that up-to-date vaccination 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

The NHSN application collects data on the number of individuals meeting various vaccination status definitions, depending on the week of data report. For all vaccination questions consider the following:

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. Facilities should report cumulative data. This cumulative count should include all individuals in question #1 who were ever vaccinated 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.

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. Optional Weekly Influenza and RSV Vaccination

Background

On average, about 8 percent of the U.S. population gets sick from influenza each season, Seasonal influenza vaccines are an effective way to combat influenza (CDC, 2023).

There are an estimated 60,000–160,000 hospitalizations and 6,000–10,000 deaths annually due to Respiratory Syncytial Virus (RSV) among adults ages 65 years and older (CDC, 2023). In August of 2023 a newly available vaccine against RSV was recommended for adults 60 years of age and older may receive a single dose of RSV vaccine using shared clinical decision-making (SCDM).



In addition to COVID-19 vaccination described in section 3 above, the NHSN Respiratory Pathogens Vaccination Module allows facilities to optionally report data on vaccinations against influenza and RSV among LTCF residents in the United States.

Settings

Long-term care facilities may enroll in NHSN and report Influenza and RSV vaccination data.

Requirements

While it is optional to report Influenza/RSV vaccination data among residents in NHSN, participating facilities must report data according to this protocol, using the NHSN definitions described herein, to ensure data are uniformly reported across facilities.

CDC/NHSN encourages facilities to update Influenza and RSV vaccination summary data on a weekly basis, so they have the greatest impact on Influenza and RSV vaccination activities. The week-end date determines which month a week is included in. For example, reporting data for the week of January 29 through February 2 is considered as submitting data for a week in February, not January. This is because the week-end date (February 2) is in February.

Reporting Instructions

Forms, Description, and Purpose

All facilities reporting RSV or Influenza vaccination data to the weekly summary module must complete the following data collection forms.

Data Collection Forms

- *Optional Weekly Influenza and RSV Vaccination Cumulative Summary for Residents of LTCFs* (CDC 57.218)
 - This is used to collect data on summary Influenza and RSV 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.

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. Note this is the same denominator field used when reporting COVID-19 Vaccination data among LTCF residents. The number of residents will be auto-completed based on the number of residents entered for this question for the corresponding week on the COVID-19 vaccination form.



Numerator Categories

Individuals should be counted as vaccinated for influenza if they receive influenza vaccine any time from when it first became available for the current season, such as July, through the reporting week. The current reporting season ends when the next seasonal influenza vaccine becomes available. This generally occurs in July.

Individuals should be counted as vaccinated for RSV if they received RSV vaccination any time from when it first became available in August 2023. RSV vaccination is currently approved and recommended for administration as a single dose; sufficient evidence does not exist at this time to determine the need for revaccination.

It is optional for facilities to complete the either Influenza and/or RSV numerator fields in the NHSN application. If facilities choose to participate, they are required to complete the following fields:

- a. received the most recent recommendation for Influenza and/or RSV vaccination administered at the healthcare facility; or reported in writing (paper or electronic) or provided documentation that up-to-date vaccination 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 influenza and/or RSV 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 the influenza and/or RSV vaccination; or
- d. had an unknown vaccination status or did not otherwise meet any of the definitions of the other numerator categories.

Numerator Notes

The NHSN application collects data on the number of individuals meeting various vaccination status definitions, depending on the week of data report. For all vaccination questions consider the following:

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. Facilities should report cumulative data. This cumulative count should include all individuals in question #1 who were ever vaccinated 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 Influenza or RSV 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 Influenza or RSV 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 Influenza or RSV 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 Influenza or RSV 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 Influenza or RSV vaccine, as written documentation is not required for NHSN reporting.

Methodology

The influenza and RSV vaccination summary data reporting enables a healthcare facility to record weekly Influenza and/or RSV vaccination data for LTCF residents. If electing to report either influenza and/or RSV then data must be entered for the denominator category and the four corresponding numerator fields for each vaccine type facilities, choose to report.



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 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.

The Influenza and RSV vaccination coverage rates are 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.

5. Key Terms

Key term	Definition for purposes of the Respiratory Virus 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).
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.