

The National Healthcare Safety Network (NHSN) Manual

2024-2025 RESPIRATORY PATHOGENS & VACCINATION PROTOCOL

Weekly Respiratory Pathogens and Vaccination Module for Long-term Care Facility Residents

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1. Introduction to the Weekly Respiratory Pathogens & Vaccination Module

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. The NHSN COVID-19 Vaccination Cumulative Summary Modules and COVID-19 Surveillance Pathways Module were developed to collect data on COVID-19 case data and vaccination coverage among certain populations, such as long-term care facility (LTCF) residents in the United States.

The COVID-19 Surveillance Pathways Module was launched in April 2020. The Weekly COVID-19 Vaccination Module was launched in December 2020 when the COVID-19 vaccines were introduced. Person-level COVID-19 Vaccination Reporting for LTCF residents was introduced in March 2022. In October 2023, the Weekly COVID-19 Vaccination Module and COVID-19 Surveillance Pathways Module expanded to include optional reporting of vaccination against other respiratory pathogens [Influenza and Respiratory Syncytial Virus (RSV)].

Beginning September 30, 2024, weekly case, hospitalization, and vaccination data for respiratory pathogens are collected on a single data collection form. This simplifies reporting and reduces burden while still collecting important public health data.

Objectives: The Weekly Respiratory Pathogens and Vaccination Module is designed to ensure that reporting of respiratory pathogen cases, hospitalizations, and vaccination data is consistent within a single healthcare facility and comparable across facilities over time. This module enables facilities to collect, track, and report data on cases, hospitalizations, and vaccination against respiratory pathogens on a weekly basis. Weekly summary data can be submitted manually or via .CSV file upload. Facilities can also enter data into the Person-Level COVID-19 Vaccination Forms to report COVID-19 vaccination data.

Facilities benefit by receiving technical support and standardized methodologies, including a web-based application, for conducting case and vaccination surveillance activities. Using NHSN to monitor cases, hospitalizations, and 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, customize a care plan, and encourage vaccination for unvaccinated persons.

By using NHSN, these data can be made available to public health authorities at the local and national levels to identify coverage gaps and inform infection prevention and control (IPC) policies and recommendations.

2. Respiratory Pathogen Case and Vaccination Coverage among Long-term Care Facility Residents

Settings

Long-term care facilities may enroll in NHSN and report respiratory pathogen cases, hospitalizations, and vaccination data through the LTCF Component.

Respiratory Pathogens and Vaccination Requirements

Participating facilities agree that any respiratory pathogen case and/or vaccination data submitted are reported according to this protocol, using the NHSN definitions described herein and in the table of instructions, to ensure data are uniformly reported across facilities.

CDC/NHSN encourages facilities to update Respiratory Pathogen and Vaccination summary data on a weekly basis, so they have the most actionable impact on public health and IPC activities.

Facilities should follow state and national regulatory rules for frequency of reporting. For additional or further questions regarding reporting requirements please contact CMS.

Resources on reporting data for weeks prior to September 30, 2024 are archived here: [Archived COVID-19/Respiratory Pathogens and Vaccination Materials | NHSN | CDC](#)

Timestamps and Coordinated Universal Time

Since February 2024, timestamps in the NHSN application have displayed Coordinated Universal Time (UTC). UTC is the international time standard. UTC serves as a uniform and universal reference to measure time across all time zones. UTC has been implemented as part of ongoing NHSN system upgrades and modernization efforts.

Reporting Instructions

Weekly reporting:

Weeks run Monday – Sunday. Please keep in mind that the week-end date determines which month a week is included in. For example, reporting data for the week of July 29, 2024 through August 3, 2024 is considered as submitting data for a week in August, not July. This is because the week-end date (August 3rd) is in August.

All facilities submitting data for reporting weeks on or after September 30, 2024 must complete the form *Weekly Respiratory Pathogens and Vaccination Summary for Residents of LTCFs* (CDC 57.218)

This form is used to collect data on summary respiratory pathogen cases, hospitalizations, and 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.

If a user is choosing not to enter data for optional fields, those questions should be skipped and left blank.

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 resident should be counted only once in the denominator.

Note: Facilities using the COVID-19 Person-Level Vaccination Form will have this field auto-populated based on the person-level data.

Numerator

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

- For vaccination data, 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.
- Alternatively, for positive tests, facilities should only report individuals who tested positive during the current reporting week. For hospitalizations, facilities should only report those who were hospitalized during the reporting week and had a positive test in the 10 days before hospitalization.
- When reporting vaccination questions related to positive tests and hospitalizations, facilities should determine if a resident had received a vaccine 14 days or more before the positive test.
- Review the Weekly Respiratory Pathogens and Vaccination Module for Long-term Care Facility Residents [table of instructions](#) for detailed instructions on required fields and how to complete each question

Numerator Categories

1. Number of residents who have 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.

2. Number of residents who have received the current season’s annual influenza vaccine administered at the healthcare facility; or reported in writing (paper or electronic) or provided documentation that vaccination was received elsewhere
3. Number of residents who have received the RSV vaccine administered at the healthcare facility; or reported in writing (paper or electronic) or provided documentation that vaccination was received elsewhere
4. Number of residents during the reporting week with a positive COVID-19 Test.
5. Number of residents in Question #3a who received the up-to-date COVID-19 vaccine 14 days or more before the positive test
6. Number of residents during the reporting week with a positive Influenza test
7. Number of residents in Question #3b who received this season’s annual influenza vaccine 14 days or more before the positive test
8. Number of residents during the reporting week with a positive RSV test
9. Number of residents in Question #3c who received RSV vaccine 14 days or more before the positive test
10. Number of residents hospitalized during the reporting week who have had a positive COVID-19 test in the last 10 days.
11. Number of residents in Question #4a who received the up-to-date COVID-19 vaccine 14 days or more before the positive test
12. Number of residents hospitalized during the reporting week who have had a positive Influenza test in the last 10 days.
13. Number of residents in Question #4b who received this season’s annual influenza vaccine 14 days or more before the positive test
14. Number of residents hospitalized during the reporting week who have had a positive RSV test in the last 10 days
15. Number of residents in Question #4c who received RSV vaccine 14 days or more before the positive test

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 Weekly Respiratory Pathogens & Vaccination Module enables LTCFs to record respiratory pathogen case, hospitalization, and vaccination data for LTCF residents each week. Data must be entered for the denominator and the required numerator fields describing cases, hospitalizations, and vaccination.

Note that any new data that are entered into NHSN for an existing entry will overwrite previously-entered data for that surveillance week.

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.

Vaccination coverage rates are calculated using the following formula:

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

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