# How to Run Respiratory Pathogens and Vaccination Data Reports for Residents of Long-Term Care Facilities: September 30, 2024 and Forward

### Introduction

Facilities can review respiratory pathogens and vaccination summary data in NHSN for healthcare personnel (HCP) and residents of long-term care facilities. Facilities review these data through line listings, which are detailed lists of each record entered into NHSN. Line listings are available to both facilities and groups. This guidance document provides step-by-step instructions for using the "**Respiratory Pathogens and Vaccination – Resident Cumulative Summary Data**" line listing report. Specifically, facilities can review weekly rates of COVID-19, influenza, and Respiratory Syncytial Virus (RSV) cases, hospitalization, and vaccination.

If you are interested in viewing HCP COVID-19 vaccination data from January 1, 2024 to September 29, 2024, please see the following document: <u>How to Run Healthcare Personnel COVID-19 Vaccination Data Reports for Long-Term Care Facilities: January 2024 and Forward (cdc.gov).</u>

If you would like to view HCP COVID-19 vaccination data prior to January 1, 2024 or additional resources pertaining to data analysis, please refer to the following webpage: <u>Respiratory Pathogens and Vaccination</u> <u>Resources | NHSN | CDC</u>.

### Example

The example below outlines how a facility can review COVID-19, influenza, and RSV cases, hospitalization, and vaccination data for residents beginning with the week of September 30, 2024. To view this information, you can modify a line listing report to include the variables of interest.

### **Generating Data Sets**

Generating datasets is the first step to performing analysis in NHSN. This process will freeze your NHSN data at the current date and time by copying those data into defined datasets. When you wish to view updates to the data contained in your NHSN reports or to include data entered since the datasets were last generated, you must regenerate datasets for those updates to be reflected. Datasets are user-specific; therefore, each user in NHSN who wishes to analyze data must generate datasets.

To generate datasets in NHSN, navigate to "Analysis" and "Generate Data Sets." Next, on the "Reporting Data Sets" tab, click "Generate Reporting Data Sets." A pop-up alert will appear, asking the user if it is ok for previously generated datasets to be overwritten.



# **Creating the Line Listing**

Once you have generated your datasets, you are ready to produce a line listing report.

- 1. Navigate to "Analysis" and "Reports."
- 2. On the "Analysis Reports" screen, click on the "Respiratory Pathogens and Vaccination" folder (indicated by the letter A and highlighted in the screenshot below)
  - Archived (listed immediately under the Respiratory Pathogens and Vaccination line) is where you can access reports for COVID-19 vaccination and pathways reporting for residents prior to the reporting week of 9/30/2024-10/6/2024.
- Select the "RPV Summary" subfolder (indicated by the letter "B" and highlighted in the screenshot below). Since this guide discusses resident data, and not healthcare personnel data, the "Respiratory Pathogens and Vaccination" folder is selected in the example below, regardless of the time period included in the output.
- 4. Click on the report that you would like to run. In our example, "Line Listing Respiratory Pathogens and Vaccination Resident" (indicated by the letter "C" and highlighted in the screenshot below).



# **Modifying the Report**

Using the "Modify Report" option allows you to customize your report. You can add a title to the output, select a time period, and add filters. You may also select additional variables, remove variables from the default list, choose how to sort variables, and select display options. Below are modifications for this example.



#### **Time Period**

To filter the data by time period, choose the "Time Period" tab at the top of the page. If you do not select a time period, your report will include all data from your previously generated dataset. For our example, we are not modifying the time period.

#### Filters

The "Filters" tab allows you to filter the data displayed in the report. For our example, we are not filtering the data.

Modify "Line Listing - Respiratory Pathogens and Vaccination - Resident"											
Show descriptive variable names (Print Lis	st) Ar	nalysis Data Set: LTC_CC	OVID19_PathVacc_Res	Type: Line Listing Last Generated (UTC) : October 16, 2024 6:5-							
Title/Format Time Period F	ilters Display Variables	Sort Variables	Display Options								
Additional Filters: 🛛 Show	🖹 Clear										
AND OR						Add group					
AND OR						Add rule					
						Delete					
Week of data collection, end	d date				~						
greater or equal ✔ 09/3	0/2024										
Additional Filters: Show	d date					Add group Add rule Delete					

#### **Display and Sort Variables**

The "Display Variables" and "Sort Variables" tabs are specific to line listing reports and allow you to display and sort specific variables in your report. Both tabs allow you to move variables from the available list in the left column to the selected list in the right column by using the directional arrows in the center.

You can also re-order the selected variables using the "Up" and "Down" buttons found to the right of the selected variables list. For our example, the variables we would like to view are already in the selected variables column. The variables were moved up from their initial position so that they were grouped together for ease of viewing the report.

lify "Line Listing - Respiratory Pathogens and \	/accination - Resident"
Show descriptive variable names (Print List)	Analysis Data Set: LTC_COVID19_PathVacc_Res Type: Line Listing Last Generated (UTC) : October 16, 2024 6:54 F
Title/Format Time Period Filters	Display Variables Sort Variables Display Options
Display Variables:	
Available Variables:	Selected Variables:
Complete? Facility Name Facility Org ID of user who imported this data Imported? Modified in NHSN Version Modify User ID personLevel Type of Facility Type of Facility Type of Vaccination User ID for Data Entry Were 1-2a saved on PL side (Y/N) Were 2b-4ci saved on PL side (Y/N)	All CMS Certification Number Selected CMS Certification Number Facility Org ID Week of data collection, start date Week of data collection, end date Create Date Last Modified Number of residents staying in this facility for at least Number of residents who are up to date with COVID- Number of residents who have received this season's a Number of residents who have received RSV vaccine COVID-19: Residents with a Positive Test Number of residents in Question #3b who received th

*Tip:* Not sure of the meaning of the variables in the list? Use this variable reference list: <u>https://www.cdc.gov/nhsn/xls/covid-19-rpv-public-data-dictionary.xlsx</u>

**Recommendation for Group-level Users:** If you are analyzing data as a NHSN Group User, it is recommended to also select a "Page By" NHSN OrgID – this will result in one table per NHSN facility. To select a "Page By" variable, select the "Display Options" tab on the modification screen, and select "Facility Org ID" as the Page by variable.

Modify "Line Listing - Respiratory Pathogens and Vaccination - Resident"										
Show descriptive	e variable names <u>(Pri</u>	int List)	An	alysis Data Set: LTC_CC	VID19_PathVacc_Res	Type: Line Listing	Ig Last Generated (UTC): October 16, 2024 6:54 PM			
Title/Format	Time Period	Filters	Display Variables	Sort Variables	Display Options					
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Facility Org II										
	Nodify "Line Listin Show descriptive Title/Format Line Listing Op Page by varial Facility Org II	Modify "Line Listing - Respiratory Pathematics"    Show descriptive variable names (Printer)    Title/Format  Time Period    Line Listing Options:    Page by variable:    Facility Org ID	Modify "Line Listing - Respiratory Pathogens and    Show descriptive variable names (Print List)    Title/Format  Time Period    Filters    Line Listing Options:    Page by variable:    Facility Org ID	Modify "Line Listing - Respiratory Pathogens and Vaccination - Resider    Show descriptive variable names (Print List)  And    Title/Format  Time Period  Filters  Display Variables    Line Listing Options:  Page by variable:  Facility Org ID	Modify "Line Listing - Respiratory Pathogens and Vaccination - Resident"    Show descriptive variable names (Print List)  Analysis Data Set: LTC_CC    Title/Format  Time Period  Filters  Display Variables  Sort Variables    Line Listing Options:  Page by variable:  Facility Org ID  Facility Org ID	Modify "Line Listing - Respiratory Pathogens and Vaccination - Resident"    Show descriptive variable names (Print List)  Analysis Data Set: LTC_COVID19_PathVacc_Res    Title/Format  Time Period  Filters  Display Variables  Sort Variables  Display Options    Line Listing Options:	Modify "Line Listing - Respiratory Pathogens and Vaccination - Resident"    Show descriptive variable names ( <u>Print List</u> )  Analysis Data Set: LTC_COVID19_PathVacc_Res  Type: Line Listing    Title/Format  Time Period  Filters  Display Variables  Sort Variables  Display Options    Line Listing Options:	Modify "Line Listing - Respiratory Pathogens and Vaccination - Resident"    Show descriptive variable names (Print List)  Analysis Data Set: LTC_COVID19_PathVacc_Res  Type: Line Listing  Last Generated (UTC) : October 16.2    Title/Format  Time Period  Filters  Display Variables  Sort Variables  Display Options    Line Listing Options:		

## **Reviewing the Report**

After modifying the report, you are now ready to view the output. Select "run" to see an HTML output, as shown below.



The "Create Date" is auto-populated and indicates the date data were first entered and saved by a user. The Date Last Modified is also auto-populated and indicates the date data were last changed by a user. The Create Date and Date Last Modified are both recorded in Coordinated Universal Time (UTC). For more information on UTC, please see the following document: UTC Guidance Document.

Here are descriptions of the report columns:

- The columns indicated by letter D display COVID-19, influenza, and RSV vaccination data for residents at a long-term care facility.
- The columns indicated by letter E display COVID-19, influenza, and RSV case data for residents at a long-term care facility.
- The columns indicated by letter F display COVID-19, influenza, and RSV hospitalization data for residents at a long-term care facility.

		D								F							
	Number of residents staying in this facility for at least 1 day during the week of data collection	Number of residents who are up to date with COVID-19 vaccines	Number of residents who have received this season's annual influenza vaccine (YYYY- YYYY)	Number of residents who have received RSV vaccine	COVID-19: Residents with a Positive Test	Number of residents in Question #3a who received the up to date COVID-19 vaccine 14 days or more before the positive test	Influenza: Residents With a Positive Test	Number of residents in Question #3b who received this season's annual influenza vaccine (YYYY- YYYY) 14 days or more before the positive test	RSV: Residents With a Positive Test	Number of residents in Question #3c who received RSV vaccine 14 days or more before the positive test.	COVID-19: Residents hospitalized this week and had a positve test in the last 10 days.	4ai. Number of residents in Question #4a who received the up to date COVID-19 vaccine 14 days or more before the positive test	Influenza: Residents hospitalized this week and had a positive test in the last 10 days	Number of residents in Question #4b who received this season's annual vaccine (YYYY- YYYY)14 or more days before the positive test	RSV: Residents hospitalized this week and had a positive test in the last 10 days.	4ci. Number of residents in Question #4c who received RSV vaccine 14 days or more before the positive test	
ô	110	80	40	20	30	10	10	5	20	5	20	5	10	5	15	5	
7	20	10			0	0					0	0					
1	25	15			0	0					0	0					

Based on the data generated for the reporting week 9/30/2024 - 10/6/2024, we can conclude the following:

- 110 Residents stayed at this facility for at least 1 day during the week of data collection.
- 80 Residents are up to date (UTD) with COVID-19 vaccines.
- 40 Residents received the influenza vaccine for the 2024-2025 influenza season.
- 20 Residents received the RSV vaccine.
- 30 Residents have a positive COVID-19 test.
- 10 Residents have a positive influenza test.
- 20 Residents have a positive RSV test.
- 20 Residents hospitalized this week received a positive COVID-19 test in the last ten days.
- 10 Residents hospitalized this week received a positive influenza test in the last ten days.
- 15 Residents hospitalized this week received a positive RSV test in the last ten days.

*Note:* The data in this example output are fictitious and intended for illustrative purposes only.