

Facility Line Listing: All COVID-19 Vaccination Cumulative Summary Data

December 2021

Introduction

Line listings for COVID-19 vaccination summary data can be produced in NHSN for healthcare personnel, long-term care (LTC) residents, and dialysis patients. The line listing is an organized, detailed list of each record entered into NHSN, available to both facilities and groups. The purpose of this resource is to provide step-by-step instructions for using the “**All COVID-19 Vaccination Cumulative Summary Data**” line listing report to view weekly rates of additional or booster doses. Note that while this example uses the line list for LTC residents, similar steps can be followed for all COVID-19 Vaccination Cumulative Summary Data line list reports.

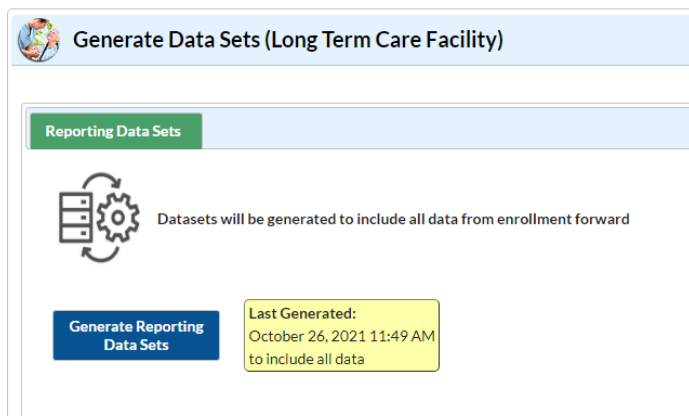
Example

If you are interested in seeing the number of residents with an initial completed COVID-19 vaccine series and who received an additional or booster vaccine, the steps below show how to modify a line listing report including the information 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 > GenerateData Sets. Then, on the Reporting Data Sets tab, click “Generate Reporting Data Sets”. Any datasets previously generated will be overwritten.



Generate Data Sets (Long Term Care Facility)

Reporting Data Sets

Datasets will be generated to include all data from enrollment forward

Generate Reporting Data Sets

Last Generated:
October 26, 2021 11:49 AM
to include all data



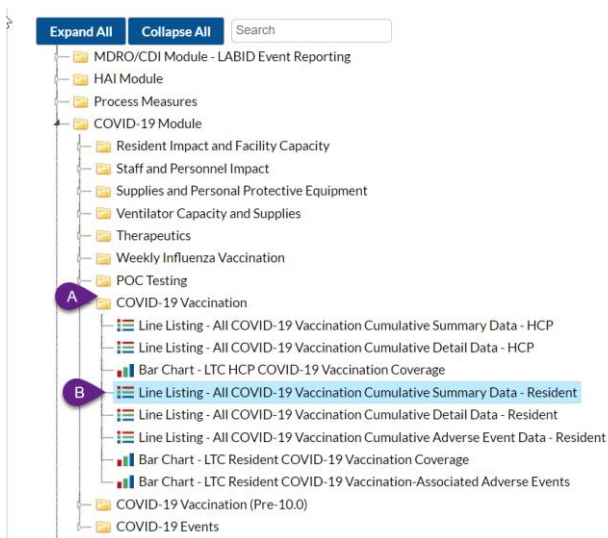
Centers for Disease Control
and Prevention
National Center for Emerging and
Zoonotic Infectious Diseases

Creating the Line Listing

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

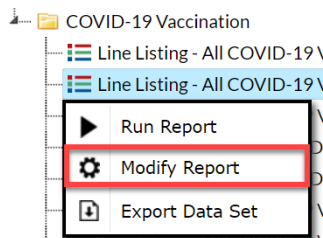
1. On the “Analysis Reports” screen, click on the “COVID-19 Module” folder.
2. Select the “COVID-19 Vaccination” subfolder (A). Since this guide discusses resident, not healthcare personnel data, the folder “COVID-19 Vaccination” is selected in the example below, regardless of the time period included in the output.

Note that the folder “COVID-19 Vaccination” includes default output variables for reporting weeks after the surveillance week of 9/27/2021-10/3/2021 for healthcare personnel data while the folder “COVID-19 Vaccination (Pre-10.0)” includes default output variables for weeks prior to the surveillance week of 9/27/2021-10/3/2021 for healthcare personnel data. This is because many variable names changed for healthcare personnel data following an NHSN application update on September 27, 2021. Click on the report that you would like to run. In our example, “Line Listing – All COVID-19 VaccinationCumulative Summary Data – Resident” (B).



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, add filters, select additional variables, or remove variables from the default list, choose how to sort variables, and select display options. Below are modifications for this example. For more detailed information on how to modify a report, please refer to the [How to Modify a Report Quick Reference Guide](#).



Time Period

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

Filters

The “Filters” tab allows you to further filter the data that display in the report. The default filter will restrict output data from 9/27/2021 and onward. You can remove this filter to create reports that include data entered before 9/27/2021 by simply clicking “Delete.” For our example, we do not need to filter the data.

The screenshot shows the 'Filters' tab selected in the report configuration interface. The title bar reads 'Modify "Line Listing - All COVID-19 Vaccination Cumulative Summary Data - Resident"'. Below the title bar, there are several tabs: 'Title/Format', 'Time Period', 'Filters' (selected), 'Display Variables', 'Sort Variables', and 'Display Options'. The 'Filters' section includes an 'Additional Filters' area with 'Show' and 'Clear' buttons. Below this, there is a filter rule configuration area with 'AND' and 'OR' options. A rule is defined for the variable 'Week of data collection, start date' with a 'greater or equal' operator and the value '9/27/2021'. A 'Delete' button is circled in red, indicating the action to remove the filter.

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, we added 3 variables of interest, highlighted below, and removed several default variables for ease of review.

The screenshot shows the 'Display Variables' tab selected in the report configuration interface. The title bar reads 'Modify "Line Listing - All COVID-19 Vaccination Cumulative Summary Data - Resident"'. Below the title bar, there are several tabs: 'Title/Format', 'Time Period', 'Filters', 'Display Variables' (selected), 'Sort Variables', and 'Display Options'. The 'Display Variables' section includes an 'Available Variables' list on the left and a 'Selected Variables' list on the right. Three variables in the 'Available Variables' list are highlighted in yellow: 'Number of residents in question #2 that are eligible to', 'Number of residents in question 4 who have received', and 'Percentage of all eligible individuals who have receive'. The 'Selected Variables' list includes 'Facility Org ID', 'Type of Vaccination', 'Week of data collection, start date', 'Week of data collection, end date', 'Number of residents staying in this facility for at least', 'Cumulative number of residents in Question #1 who h', 'Cumulative number of Residents who have started bu', 'Medical contraindication', and 'Percentage of persons who have received a completec'. The 'Selected Variables' list has 'Up', 'Down', and 'Undo' buttons to its right.



Recommendation for Group-level Users: If you are analyzing data as a NHSN Group User, it is recommended to also “Page By” 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 selecting “orgID” as the Page by variable.

Final Report

After modifying the report, you are now ready to see the output. Select run to see an HTML output, as shown below. The key columns related to additional, or booster doses are outlined in red boxes.

National Healthcare Safety Network
 Line Listing - All COVID-19 Vaccination Cumulative Summary Data - Resident
 As of: December 21, 2021 at 8:58 AM
 Date Range: All LTC_COVID19_VACCSUM_RES
 If (((survWeekStart >= input('09/27/2021', mmdyyy10,)))

Please note the descriptive label for the percent additional dose will be updated in a future release. Percent additional dose is calculated as "Number of residents in Question 4 who have received an additional dose of COVID-19 vaccine at this facility or elsewhere since August 2021 divided by the Cumulative number of residents in question 1 who have completed any COVID-19 vaccine series at this facility or elsewhere multiplied by 100

Facility Org ID=55097

Facility Org ID	Type of Vaccination	Week of data collection, start date	Week of data collection, end date	Number of residents staying in this facility for at least 1 day during the week of data collection	Cumulative number of residents in Question #1 who have completed any COVID-19 vaccine series at this facility or elsewhere	Cumulative number of Residents who have started but not completed COVID-19 vaccine(s) at this facility or elsewhere	Medical contraindication	Percentage of persons who have received a completed vaccination course against SARS-CoV-2	Number of residents in question 4 who have received an additional dose of COVID-19 vaccine at this facility or elsewhere since August 2021	Percentage of all eligible individuals who have received an additional dose of COVID-19 vaccine
55097	COVID19	11/22/2021	11/28/2021	307	214	52	1	69.935	13	6.075
55097	COVID19	11/29/2021	12/05/2021	90	25	25	25	38.462	10	40.000
55097	COVID19	12/06/2021	12/12/2021	80	20	20	20	33.333	8	40.000
55097	COVID19	11/15/2021	11/21/2021	44	36	2	0	81.818	0	0.000

Sorted by orgID survWeekStart

Data contained in this report were last generated on December 21, 2021 at 8:54 AM to include all data.

If we look at survey week 11/29 through 12/5, we see that the facility had 90 residents that week, 25 of whom had completed their initial COVID-19 vaccine series. Among these 25, 10 residents had also received an additional or booster dose of COVID-19 vaccine, for a rate of 40% of eligible residents receiving an additional or booster dose (10/25*100).

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

Additional Resources

How to Export Data from NHSN: <https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/exportdata.pdf>

How to Generate Data Sets Quick Reference Guide: <https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/generatedatasets-psc-508.pdf>

How to Modify A Report Quick Reference Guide: <https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/howtomodifyreport.pdf>

How to Save Custom Reports for Future Use Quick Reference Guide: <https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/customoutputoptions.pdf>



Centers for Disease Control and Prevention
 National Center for Emerging and Zoonotic Infectious Diseases