How to Run COVID-19 Vaccination Reports for Long-Term Care Facilities Prior to June 2023

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: After the June 2023 update to the NHSN application, some variables changed. For example, information on primary vaccination series is no longer collected for **residents** beginning with Quarter 3 2023 (June 26, 2023-September 24, 2023). As such, for guidance on how to view resident data prior to June 26, 2023, please use this document. If you are interested in viewing resident data from June 26, 2023, or later, please see this document: How to Run Resident COVID-19 Vaccination Data Reports for Long-Term Care Facilities for June 2023 and Forward

After the NHSN application update in January 2024, the questions on primary series vaccination were removed from the data collection forms for **healthcare personnel**. Therefore, if you would like to view healthcare personnel vaccination data prior to January 1, 2024, please use this document. If you are interested in viewing healthcare personnel vaccination data from January 1, 2024, or later, please see the following document: How to Run Healthcare Personnel COVID-19 Vaccination Data Reports for Long-Term Care Facilities: January 2024 and Forward

Example

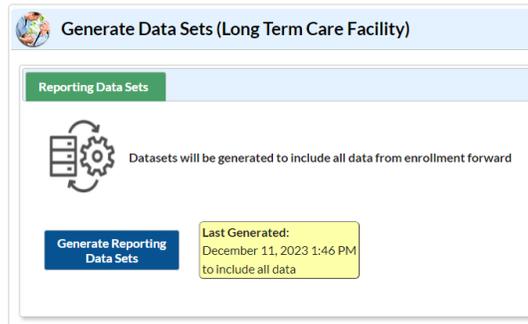Say you want to determine the number of residents during weeks before June 26, 2023 who:

      a. received an initial completed primary COVID-19 vaccine series

      b. received an additional or booster vaccine

      c. received a second additional or booster vaccine

      d. are up to date with COVID-19 vaccines

You can modify a line listing report to include the variables of interest to view this information. The steps below show how to do this.

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.

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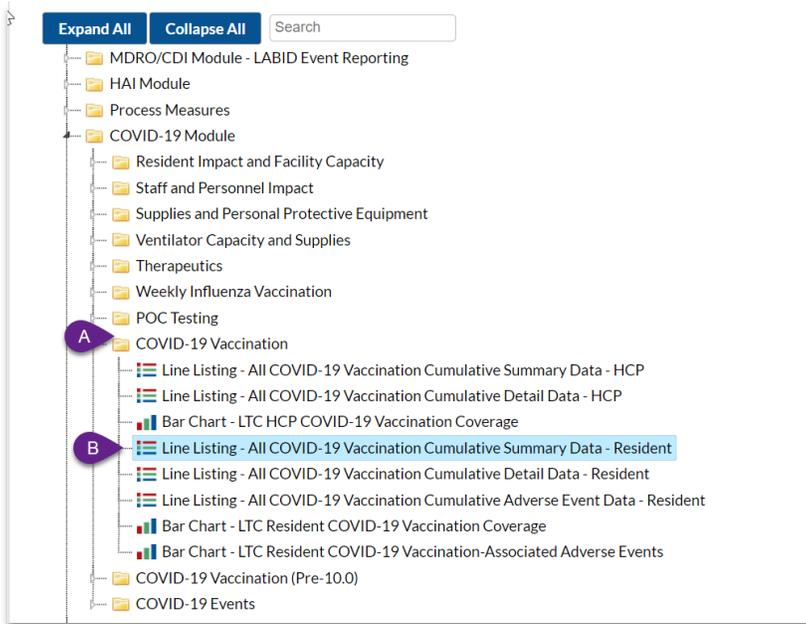# Creating the Line Listing

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 (indicated with an "A" in the screenshot below). 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.
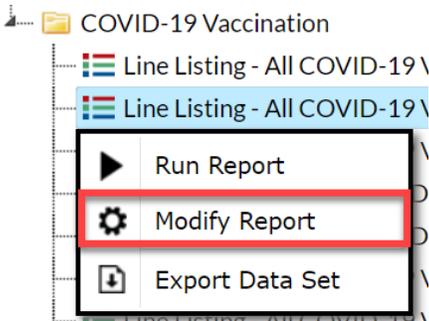
3. Click on the report that you would like to run. In our example, "Line Listing – All COVID-19 Vaccination Cumulative Summary Data – Resident" (indicated with a "B" in the screenshot below).

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, add filters, select additional variables, or remove variables from the default list, choose how to sort variables, and select display options.

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.

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 want to see 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 in the report.

Recommendation for Group-level Users: If you are analyzing data as a NHSN Group User, it is recommended to also select a "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 select "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 with the variables of interest are within the red box.

National Healthcare Safety Network
Line Listing - All COVID-19 Vaccination Cumulative Summary Data - Resident
As of: July 7, 2022 at 10:50 AM
Date Range: LTC_COVID19_VACCSUM_RES survWeekEnd 09/27/2021 to 06/12/2022
if (((survWeekStart >= input('09/27/2021',mmddyy10.))))

Facility Org ID=30074

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	COMPLETE PRIMARY VACCINATION SERIES - Residents	PARTIAL VACCINATION - Residents	Medical contraindication	Offered but declined	Unknown vaccination status	Additional or Booster Vaccination - Residents	Only One Booster - Residents	Two or More Boosters – Residents	Vaccinations Update to Date - Residents
30074	COVID19	09/27/2021	10/03/2021	100	50	50	0	0	0	0	.	.	.
30074	COVID19	10/18/2021	10/24/2021	307	214	52	1	5	35	13	.	.	.
30074	COVID19	11/08/2021	11/14/2021	80	20	2	0	2	56	0	.	.	.
30074	COVID19	11/29/2021	12/05/2021	105	40	50	5	5	5	5	.	.	.
30074	COVID19	12/13/2021	12/19/2021	307	214	52	1	5	35	13	.	.	.
30074	COVID19	12/20/2021	12/26/2021	307	214	52	1	5	35	13	.	.	.
30074	COVID19	01/10/2022	01/16/2022	307	214	52	1	5	35	13	.	.	.
30074	COVID19	01/17/2022	01/23/2022	307	214	52	1	5	35	13	.	.	.
30074	COVID19	01/24/2022	01/30/2022	307	214	52	0	6	35	13	.	.	.
30074	COVID19	01/31/2022	02/06/2022	90	57	20	9	2	2	2	.	.	.
30074	COVID19	02/07/2022	02/13/2022	307	214	52	1	5	35	13	.	.	.
30074	COVID19	02/14/2022	02/20/2022	50	5	5	20	10	10	5	.	.	.
30074	COVID19	02/21/2022	02/27/2022	309	214	52	3	5	35	13	.	.	.
30074	COVID19	02/28/2022	03/06/2022	200	50	50	25	25	50	25	.	.	.
30074	COVID19	03/07/2022	03/13/2022	24	16	0	1	7	0	1	.	.	.
30074	COVID19	03/14/2022	03/20/2022	24	16	0	1	7	0	10	.	.	.
30074	COVID19	03/21/2022	03/27/2022	100	30	30	20	10	10	1	.	.	.
30074	COVID19	03/28/2022	04/03/2022	1	1	0	0	0	0	0	.	.	.
30074	COVID19	04/04/2022	04/10/2022	1	1	0	0	0	0	0	.	.	.
30074	COVID19	04/11/2022	04/17/2022	1	1	0	0	0	0	0	.	.	.
30074	COVID19	04/18/2022	04/24/2022	1	1	0	0	0	0	0	.	.	.
30074	COVID19	04/25/2022	05/01/2022	200	1	1	0	198	0	1	.	.	.
30074	COVID19	05/02/2022	05/08/2022	307	214	52	1	5	35	13	.	.	.
30074	COVID19	05/09/2022	05/15/2022	300	214	45	1	5	35	13	.	.	.
30074	COVID19	05/16/2022	05/22/2022	306	214	52	0	5	35	13	.	.	.
30074	COVID19	05/23/2022	05/29/2022	307	214	52	1	5	35	13	.	.	.
30074	COVID19	05/30/2022	06/05/2022	10	4	5	0	1	0	3	0	3	2
30074	COVID19	06/06/2022	06/12/2022	307	230	36	1	5	35	198	194	3	205

If we look at the time period between 9/27/2021 and 6/12/2022, we can see the changes in variables over time. We can see that at the beginning of the time period, there were only 100 residents staying at the facility for at least 1 day during data collection and that 50 had a complete primary vaccination series and 0 had received a booster. Please note that additional doses and boosters did not become available until August 2021, so it is correct that no residents had received any yet. Additionally, the second additional dose or booster and up to date vaccination questions were not added to the data collection form until May 29, 2022. This accounts for why these fields have a dot in the time period before May 29, 2022.

By the end of the report time period, 6/12/2022, we can see that the total residents included in reported has risen to 307 and that 230 have had complete primary vaccination series, 198 have had an additional dose or booster, 194 of those residents have received only one additional dose or booster, 3 of them have received two or more additional doses or boosters, and 205 of the total residents are up to date with their vaccinations.

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

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