How to Run Reports for Long-Term Care Facilities

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.

Example

Say you want to find out the number of residents 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

In order to view this information, you can modify a line listing report to include the variables of interest. 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.

To generate datasets in NHSN, navigate to Analysis > Generate Data Sets. Then, 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 datasets previously generated to be overwritten.
Creating the Line Listing

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


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.

3. Click on the report that you would like to run. In our example, “Line Listing – All COVID-19 Vaccination Cumulative 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
July 2022

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.
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 vaccination series and 0 had received a booster. Please note that additional doses and boosters did not become available until August 2021, so it makes sense 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 form until May 29, 2022. This accounts for why these fields have a dot in the time period before the effective date.

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 that 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.

**While this reference guide covers how to use the data tracking worksheet for residents of LTCFs, the same instructions apply to using the data tracking worksheet for healthcare personnel**