There is an option available in NHSN reports to produce bar charts for COVID-19 Vaccination summary data and COVID-19 Vaccination adverse reaction data for healthcare personnel and residents. A bar chart is a graphical representation of data where the length or height of the bars represents counts of records meeting the criteria.

COVID-19 Reports Available
NHSN has four options for COVID-19 Vaccination bar charts to run, three for healthcare personnel and three for residents.

Healthcare Personnel
LTC HCP COVID-19 Vaccination Coverage
This bar chart graphically shows data based on vaccination coverage for healthcare personnel.

LTC HCP COVID-19 Vaccination-Associated Adverse Events
This bar chart graphically shows manufacturer dependent adverse reaction data for healthcare personnel.

Residents
LTC Resident COVID-19 Vaccination Coverage
This bar chart graphically shows data based on vaccination coverage for residents.

LTC Resident COVID_19 Vaccination-Associated Adverse Events
This bar chart graphically shows manufacturer dependent adverse reaction data for residents.

Example
We are interested in seeing a graph of the number of healthcare personnel who received each vaccine from 12/07/2020 – 12/20/2020, stratified by dosing status (complete or partial) and the number of reported adverse reactions, stratified by vaccine manufacturer. We will need to run the bar charts “LTC HCP COVID-19 Vaccination Coverage” and “LTC HCP COVID-19 Vaccination-Associated Adverse Events”.
Generating Data Sets

Before being able to run any report, you must generate data sets. This process will freeze your NHSN data at a specific point in time and copy those data into defined data sets. To generate datasets in NHSN, navigate to Analysis > Generate Data sets. Then, on the Reporting Data Sets tab, click “Generate Reporting Data Sets”. Your previous datasets will be overwritten.

Creating the Bar Charts

2. Select the “COVID-19 Vaccination” Subfolder.
3. Click on the report that you would like to run.
   a. If you want to display bar charts to show COVID-19 vaccination coverage over time, click on “Bar Chart – LTC HCP COVID-19 Vaccination Coverage”.
   b. If you want to display bar charts to show the numbers of COVID-19 vaccination associated adverse events over time, click on “Bar Chart – LTC HCP COVID-19 Vaccination Associated Adverse Events”
Modifying the Report

Modify Report allows you to customize your report. You can add a title to the output, select a time period, add filters, and select display options. Below are modifications for this example. For more detailed information on how to modify a report, please refer to How to Modify a Report Quick Reference Guide.

After, clicking on the report you want to run, choose “Modify Report”.

You can choose to set your time period by week of data collection, end date. If you don’t select a time period, your report will include all data from your generated dataset. In this example, we were interested in seeing data from 12/07/2020 – 12/20/2020, so we set ‘Week of data collection, end date’ to 12/13/2020 (beginning) and 12/20/2020 (ending) to capture that two-week period. If interested in a one-week period, the beginning and ending dates would be the same.

On the “Filters” tab, you can enter “Partial” or “Complete” for “Vaccine Dosing Status” to display only the number of persons received partial or complete COVID-19 vaccinations. Note: No filters were applied to the output in the example.
On the “Display Options” tab, you can select your chart variable and stratification variable. In the example of vaccination coverage bar charts, our chart variable is “Week of data collection, end date” and our stratification variable is “Vaccine Dosing Status”.

In the example of vaccination associated adverse event bar charts, our chart variable is “Week of data collection, end date” and our stratification variable is “Vaccine Name”. On the “Filters” tab, you can enter a vaccine manufacturer from the drop-down list to display only the number of adverse events associated with the vaccine of the manufacturer selected. **Note: No filters were applied to the output in the example.**
After modifying the report, you are now ready to see the output. The example bar charts shown below are the result of the example modifications. **Note:** The screen can only accommodate up to 8 weeks of data.

For healthcare personnel vaccination coverage, there is one bar for each week of data collection end date and each bar is stratified by vaccine status (Complete or Partial).

![Bar Chart](image)

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

For vaccination-associated adverse reactions, there is one bar for each week of data collection end date and each bar is stratified by vaccine manufacturer. Since no adverse reactions were reported during 12/14/2020 – 12/20/2020, there is no bar for that week.
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

