

Quick Reference Guide: How to Run CMS COVID-19 Vaccination Rate Table Reports

Introduction

The Centers for Medicare and Medicaid Services (CMS) rate table provides a detailed summary of vaccination rates for healthcare personnel (HCP) entered in the NHSN database. Rate tables for COVID-19 vaccination summary data can be produced in the NHSN Healthcare Personnel Safety (HPS) Component. The tables are available to both facilities and groups in quarterly or monthly reporting periods and can be used to preview the data that will be submitted to CMS as part of a Quality Reporting Program. The purpose of this resource is to provide step-by-step instructions for using the “COVID-19 Vaccination Data for CMS” rate table report to view quarterly or monthly vaccination rates for HCP.

Example

Suppose a CMS-certified acute care hospital would like to verify if COVID-19 vaccination data was submitted successfully for HCP and to check the HCP vaccination rates during Quarter 3 (months of July, August, and September) of 2022.

Generating Datasets

The first step to performing analysis in NHSN is to generate datasets. This process will capture your NHSN data at a specific point in time and showcase it into defined datasets. When you wish to view updates to the data in your NHSN reports, you must regenerate the datasets for updates to be reflected. Datasets are user-specific. Therefore, each user in NHSN who wishes to analyze data must generate their own datasets. To do so:

1. Navigate to Analysis > Generate Data sets
2. On the Reporting Data Sets tab, click “Generate Reporting Data Sets”
3. New reports will be generated, and any previous datasets will be overwritten

Generate Data Sets (Healthcare Personnel Safety)

Reporting Data Sets

Include data for the following time period:

Beginning: 01/2019 | Ending: mm/yyyy | Clear Time Period

Generate Reporting Data Sets

Last Generated: March 29, 2023 11:21 AM to include data beginning 01/2019

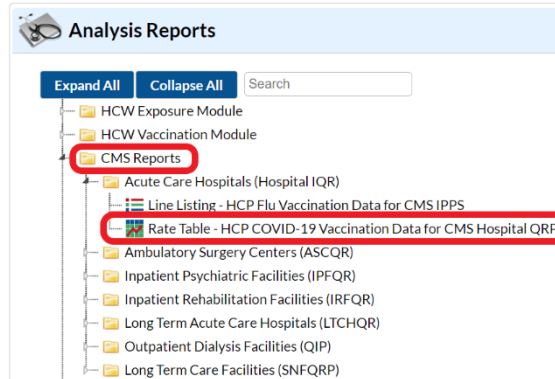
For more detailed instructions on how to generate datasets, please refer to the [Generating Data Sets Quick Reference Guide](#).



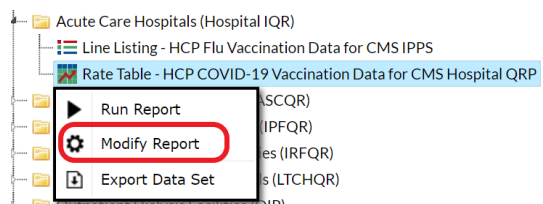
Creating the CMS Rate Report Table

Once your datasets have generated, you are ready to run a rate report:

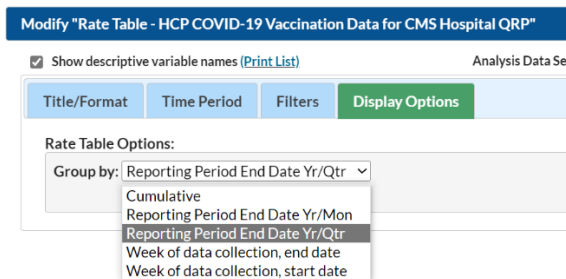
1. On the “Analysis Reports” screen, click the “CMS Reports” folder.
2. Select the “Acute Care Hospitals” Subfolder.
3. Click the report that you would like to run. In our example, “Rate Table – HCP Covid-19 Vaccination Data for CMS Hospital QRP”



4. After selecting the report, a pop-up box will appear that will allow you to “Run Report,” “Modify Report,” or “Export Data Set.” Select “Modify Report” to customize your report.



5. Click on the “Display Options” Tab and use the drop-down box to select your preferred reporting period for COVID vaccination rates.



Modifying the Report

Modify Report allows you to customize your report. When you choose to modify the report, the modification screen appears showing multiple tabs containing available modifications for the given report. The “Title/Format” tab allows you to update the report title and select the format in which you want the report displayed, such as HTML or PDF.

For more detailed information on how to modify a report, please refer to the [How to Modify a Report Quick Reference Guide](#).



Final Report

Quarterly CMS Rate Table

After modifying the report, you are now ready to see the output. The first example below is the default report of a Quarterly CMS rate table. It shows a facility's COVID-19 vaccination rates of acute care hospital HCP by quarter. It also has an "incomplete" column. This column can help facilities quickly determine if they are missing vaccination data for a certain quarter. You can see for Quarter 3 2022 the facility had a 77.15% COVID-19 HCP vaccination rate. In comparison, Quarter 2 2022 had incomplete data; therefore, the report is unable to produce the quarterly COVID-19 HCP vaccination rate for the facility.

National Healthcare Safety Network
Rate Table - HCP COVID-19 Vaccination Data for CMS Hospital QRP

As of: March 29, 2023 at 3:24 PM
 Date Range: HPS_COVID19_VACCMS_RATE surWeekEndYQ After and including 2021Q4
 If ((CMSProgram = "HOSPITAL"))

Facility Org ID= [REDACTED]

CMS Certification Number	Type of Facility	State	Reporting Period End Date Yr/Qtr	Incomplete	Total Vaccinated	Number of healthcare personnel	COVID 19 HCP vaccination Rate	Upper and lower 95 confidence limit
453H444444	HOSP-GEN	FL	2021Q4	Yes	-	-	-	-
453H444444	HOSP-GEN	FL	2022Q1	Yes	-	-	-	-
453H444444	HOSP-GEN	FL	2022Q2	Yes	-	-	-	-
453H444444	HOSP-GEN	FL	2022Q3	-	61.7	80	77.1	69.38, 83.745
453H444444	HOSP-GEN	FL	2022Q4	-	60.0	80	75.0	75, 75
453H444444	HOSP-GEN	FL	2023Q1	-	60.0	80	75.0	75, 75
453H444444	HOSP-GEN	FL	2023Q2	Yes	-	-	-	-

1. Incomplete submission = "Yes" If < 1 week per month during quarter of interest has complete data or CCN = "", If incomplete = "Yes" values will not display for totVacc, numHCP, HCPCOVID_PCT, HCPCOVID_PCT_CI. This does not represent all scenarios where submission may be incomplete. Consult the operational guidance for more information: Operational Guidance COVID-19 Vaccination Reporting Rule (cdc.gov).
 2. This output option represents a report for each facility, not each CCN. If your facility shares a CCN with one or more other facilities, this report will only represent the data that your facility has contributed to the overall rate for all facilities that share the CCN. You may wish to use the Group feature in NHSN to obtain a single rate for all the facilities that share a CCN.
 3. Note that only data from the core HCP categories (HCP, LIP, VOL) are included in calculations for this QRP. Therefore, data reported as part of the other contract personnel category are not included.
 4. TotVacc is the average total number of HCP vaccinated from the last week reported during each month of the quarter.
 5. NumHCP is the average total number of HCP eligible to have worked (excluding contraindications) from the last week reported during each month of the quarter.
 6. HCPCOVID_PCT is the average of the monthly percentages of HCP vaccinated in the quarter. $HCPCOVID_PCT = (HCPCOVID_PCTmonth1 + HCPCOVID_PCTmonth2 + HCPCOVID_PCTmonth3) / 3$.
- Data contained in this report were last generated on March 29, 2023 at 3:19 PM to include data beginning January 2019.

Monthly CMS Rate Table

The second table is a CMS rate table showing monthly reports. The facility can use this table to see a breakdown of the data by month. You can see in August of 2022, the facility had a COVID-19 HCP vaccination rate of 75% compared to July 2022, where the vaccination rate was 81.3%. The results show an excerpt of the facility's CMS monthly COVID-19 vaccination rates of HCP for data entered for years 2021-2023.

National Healthcare Safety Network
Rate Table - HCP COVID-19 Vaccination Data for CMS Hospital QRP

As of: March 29, 2023 at 3:21 PM
 Date Range: HPS_COVID19_VACCMS_RATE surWeekEndYQ After and including 2021Q4
 If ((CMSProgram = "HOSPITAL"))

Facility Org ID= [REDACTED]

CMS Certification Number	Type of Facility	State	Reporting Period End Date Yr/Mon	Total Vaccinated	Number of healthcare personnel	COVID 19 HCP vaccination Rate	Upper and lower 95 confidence limit
453H444444	HOSP-GEN	FL	2021M10	0	225	0.0	0, 0
453H444444	HOSP-GEN	FL	2022M01	0	100	0.0	-
453H444444	HOSP-GEN	FL	2022M05	12	18	66.7	-
453H444444	HOSP-GEN	FL	2022M06	65	80	81.3	81.25, 81.25
453H444444	HOSP-GEN	FL	2022M07	65	80	81.3	81.25, 81.25
453H444444	HOSP-GEN	FL	2022M08	60	80	75.0	75, 75
453H444444	HOSP-GEN	FL	2022M09	60	80	75.0	75, 75
453H444444	HOSP-GEN	FL	2022M10	60	80	75.0	75, 75
453H444444	HOSP-GEN	FL	2022M11	60	80	75.0	75, 75
453H444444	HOSP-GEN	FL	2022M12	60	80	75.0	75, 75
453H444444	HOSP-GEN	FL	2023M01	60	80	75.0	75, 75
453H444444	HOSP-GEN	FL	2023M02	60	80	75.0	75, 75
453H444444	HOSP-GEN	FL	2023M03	60	80	75.0	75, 75
453H444444	HOSP-GEN	FL	2023M04	60	80	75.0	75, 75

1. This output option represents a report for each facility, not each CCN. If your facility shares a CCN with one or more other facilities, this report will only represent the data that your facility has contributed to the overall rate for all facilities that share the CCN. You may wish to use the Group feature in NHSN to obtain a single rate for all the facilities that share a CCN.
 2. Note that only data from the core HCP categories (HCP, LIP, VOL) are included in calculations for this QRP. Therefore, data reported as part of the other contract personnel category are not included.
 3. NumHCP is the total number of HCP eligible to have worked (excluding contraindications) from the last week reported during the month.
- Data contained in this report were last generated on March 29, 2023 at 3:19 PM to include data beginning January 2019.

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

