



End-Stage Renal Disease Network Program

esrd.ipro.org

WHEN DATA ARE CONSIDERED COMPLETE IN NHSN?

Data are considered complete in NHSN once facilities do **ALL** of the following:

- Complete the Annual Facility Survey
- Complete a monthly reporting plan to indicate which module(s) and event(s) a facility plans to report for each month in which facility plans to perform surveillance and submit data to NHSN
- Submit event data to NHSN Dialysis protocols
- Indicate “no events” on monthly summary data page if no events were found for the month
- Submit monthly summary data to NHSN
- Resolve all outstanding alerts

STEPS FOR PERFORMING QUALITY CHECKS OF NHSN DATA

The NHSN application has several analysis reports that can be accessed to validate completeness and accuracy of data being submitted to NHSN

Generating Datasets

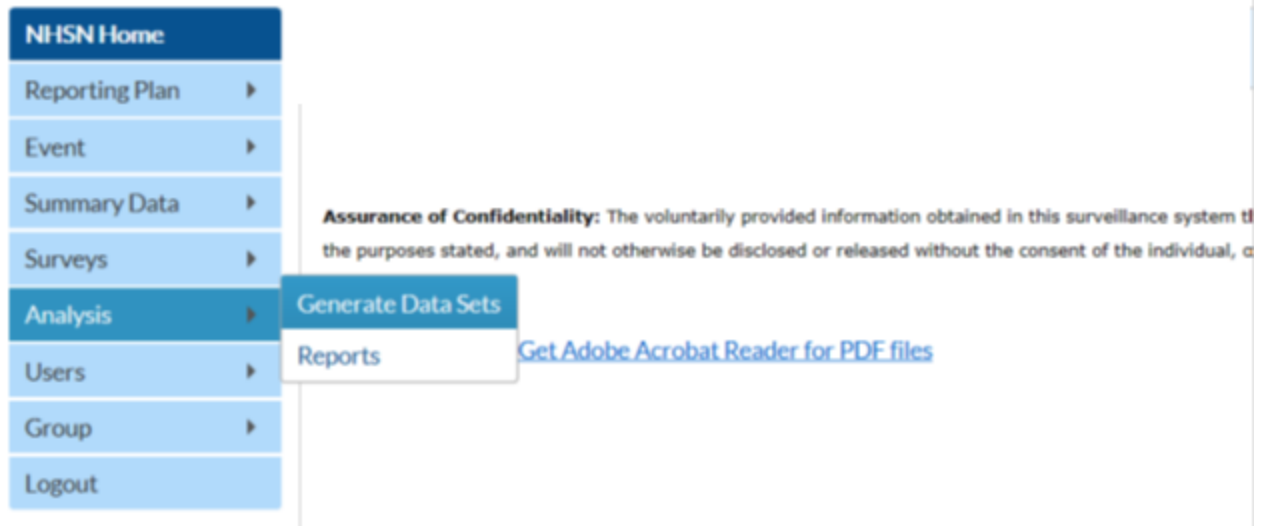
Before accessing analysis reports in NHSN, datasets must be generated to ensure the most recent data are included in the reports. Generating datasets will take a snapshot of the data that have been submitted.

Remember: Datasets must be generated prior to analyzing the data or the data will not be current.

To generate datasets:

On your NHSN landing page, select “Analysis” then “Generate Data Sets”

NHSN - National Healthcare Safety Network



The screenshot shows the NHSN navigation menu on the left, with 'Generate Data Sets' highlighted under the 'Analysis' category. A dropdown menu is open for 'Generate Data Sets', showing 'Reports' and a link to 'Get Adobe Acrobat Reader for PDF files'. A confidentiality notice is visible in the background: 'Assurance of Confidentiality: The voluntarily provided information obtained in this surveillance system for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or their legal representative.'

You will see a page titled "Generate Data Sets. Generating datasets may take a few minutes; however, you can still navigate within the NHSN application while the dataset is generating.



The screenshot shows the 'Generate Data Sets' page. At the top, there is a header with a globe icon and the text 'Generate Data Sets'. Below this, there is a large blue bar representing a dataset. The bar is labeled with '3/2015' on the left and '2/2017' on the right. Below the bar, there is a button labeled 'Generate New' (circled in red) and the text 'Last Generated: Feb 15 2017 9:29AM'.

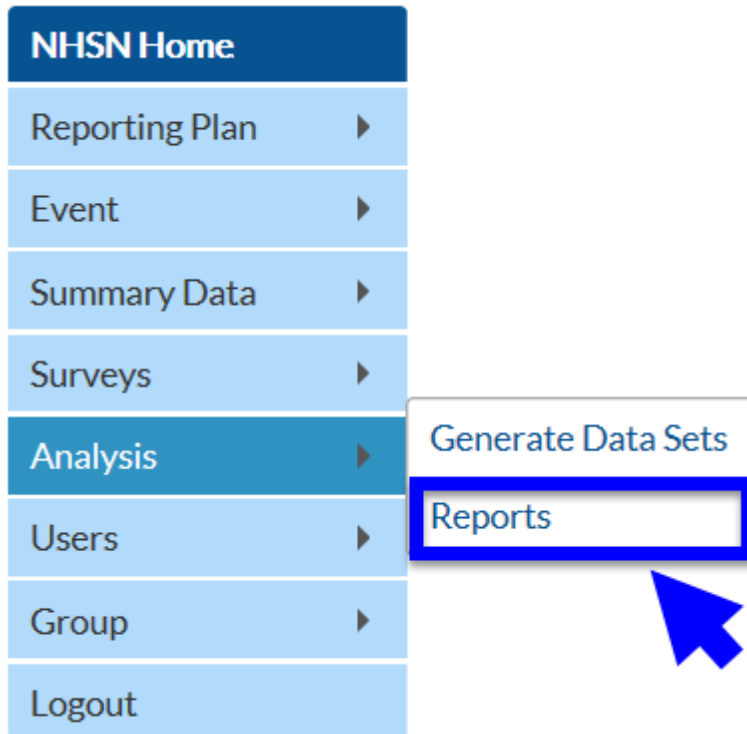
Analysis

Once your dataset has been successfully generated, select "Analysis" then "Reports."

Remember: Make sure that you have generated a new dataset before completing this step or you will risk analyzing an older dataset without the most recent updates.

To analyze NHSN data:

On your NHSN landing page, select "Analysis" then "Reports"



HAVE THE FACILITIES CORRECTLY COMPLETED THE MONTHLY REPORTING REQUIREMENTS

Step 1 Have Minimum Monthly DE Reporting Requirements Been Met?

Run this report: **Line Listing – CMS ESRD QIP Rule**

Find this report under: Analysis "Output Options" → "Advanced" folder → "CMS Reports" folder → "CDCDefined Output" folder

USE THIS REPORT TO VERIFY CMS ESRD QIP MINIMUM NHSN REPORTING REQUIREMENTS ARE MET each month, as indicated by a "Y" (Yes) on each line under the "Criteria Met this Month" column. To get a "Y" all Yes/No fields in the same row must = Y.

➤ Verify the facility's CCN is present and correct.

Org ID	CMS Certification Number	Facility Name	Location	Summary Year/ Month	DE on Reporting Plan	Dialysis Event Numerator Reported	Dialysis Event Denominator Reported	Criteria Met this Month
10856	123456	Dialysis Facility	DIAL	2014M01	Y	Y	Y	Y
10856	123456	Dialysis Facility	DIAL	2014M02	N	Y	Y	N

- **DE on Reporting Plan = Y:** if "DE" is checked on the Monthly Reporting Plan, indicating Dialysis Event data will be collected according the [Dialysis Event Protocol](#).
- **Dialysis Event Numerator Reported = Y:** if (for each dialysis event type) at least 1 dialysis event was reported that month *or* the corresponding "Report No Events" checkbox was selected on the Denominators for Outpatient Dialysis form to confirm there were zero events of that type for the month.
- **Dialysis Event Denominator Reported = Y:** if the Denominators for Outpatient Dialysis census form was completed for the month.

NHSN QUARTERLY DATA CHECKLIST

Denominator data review: Review denominator data to identify unusual monthly census data or unusual rates for individual vascular access types.

Run these reports:

Line Listing – Dialysis Events (detailed) and Line Listing – All DE Denominators. Find these reports under: Analysis “Output Options” “Device Associated Module” folder “Dialysis Events” folder “CDC Defined Output” folder

Step 2 Are the Submitted Data Correct and Complete?

Run these reports: **Line Listing – Dialysis Events (detailed)** and **Line Listing – All DE Denominators**

Find these reports under: Analysis “Output Options” → “Device-Associated Module” folder → “Dialysis Events” folder → “CDC Defined Output” folder

USE THESE TWO REPORTS TO CHECK ALL DATA ARE CORRECT AND COMPLETE.

Report A: Check all dialysis events are correctly reported. Review the “Data Validity Check PBC ABX Description” column and check if IV antimicrobial starts or positive blood cultures were missed.

Report B: Review denominator data across months. For each vascular access type, verify minimum and maximum values are reasonable and the numbers of patient-months are consistent with the facility’s census.

Follow-up:

If new information becomes available or an error is found, access the record to add, edit, and/or delete, as needed.

Org ID	Event ID	Patient ID	Transient	Event Date	IV Anti-microbial Start	IV Vancomycin Start	Positive Blood Culture	Pus Redness Swelling Event	Data Validity Check PBC ABX Description
10856	32403	0322	Y	01/20/2014	Y	Y	N	N	Is This Antimicrobial Start w/o PBC Valid?
10856	30936	1234	N	02/01/2014	N	N	Y	N	Is This PBC w/o Antimicrobial Start Valid?

Org ID	Location	Summary Year/Month	No Dialysis Events	Number of Patients: AV Fistula	Number of Buttonhole Patients	Number of Patients: AV Graft	Number of Patients: Tunneled Central Line	Number of Patients: Nontunneled Central Line	Number of Patients: Other Access Device	Patient-months	Number of Fistulas and Grafts	Number of All Central Lines
10856	DIALYSIS	2014M01	Y	38	0	32	12	2	0	84	70	14
10856	DIALYSIS	2014M02	N	38	0	33	12	1	0	84	71	13

“Check unusual changes in patient census from one month to the next.”

If there is a significant change in the number of patients reported from month to month on the Denominators for Dialysis Event form may represent a typo, a misunderstanding of the Dialysis Event Protocol, or some other error.

1. Run the “Line Listing – All DE Denominators” report and check the ‘patient-months’ column for months when your facility’s total census data are higher or lower than usual.
2. Compare the report to your facility records. Check to make sure only those outpatients who received hemodialysis on the 1st or 2nd working day of the month were each counted once, by their highest infection risk vascular access.
3. If necessary, make corrections to your Denominators for Dialysis Event form(s).

“Check reporting of unusual vascular access data.”

The vascular access types reported on the Denominators for Dialysis Event form may represent a typo, a misunderstanding of the Dialysis Event Protocol, or some other error.

1. Run the “Line Listing – All DE Denominators” report and check each vascular access type column to see if there are months when your facility’s census for that access type is higher or lower than usual.

Numerator data review: Identifying any dialysis events not reported for 3 or more consecutive months or has a population at high risk for Blood Stream Infection but has not yet reported any BSIs.

[Need more help? Email the IT Helpdesk: \[ithelp@ceda.org\]\(mailto:ithelp@ceda.org\)](#)

Step 3 How is Your Facility Doing?

Run this report: **Rate Table – Bloodstream Infection**

Find this report under: Analysis "Output Options" → "Device-Associated Module" folder → "Dialysis Events" folder → "CDC Defined Output" folder

USE THIS REPORT TO ASSESS FACILITY PERFORMANCE.

- Review facility rates over time.
- Benchmark facility rates against NHSN rates.

Rate Table Column Headers:

- **Access Type:** The vascular access type that applies to the row.
- **Summary Yr/Qtr:** The year and three month calendar quarter that applies to the row.
- **Months:** Number of months that included data during the quarter.
- **Number Bloodstream Infections (BSI):** by access type that occurred during the quarter.
- **Patient-months:** The number of patient-months by access type during the quarter.
- **Bloodstream Infection Rate/100 patient-months:** The facility's BSI rate for the quarter.

Org ID	CMS Certification Number	Location	Access Type	Summary Yr/Qtr	Months	Number Bloodstream Infections	Patient-months	Bloodstream Infection Rate/100 patient-months	NHSN Bloodstream Infection Pooled Mean Rate/100 patient-months	Incidence Density p-value	Incidence Density Percentile
10856	123456	DIALYSIS	Fistula	2013Q4	3	0	114	0.000	0.48	0.5779	25
10856	123456	DIALYSIS	Fistula	2014Q1	3	0	113	0.000	0.48	0.5808	25
10856	123456	DIALYSIS	Graft	2013Q4	3	0	98	0.000	0.88	0.4228	50
10856	123456	DIALYSIS	Graft	2014Q1	3	0	94	0.000	0.88	0.4385	50
10856	123456	DIALYSIS	Tunneled	2013Q4	3	2	36	5.556	3.24	0.3250	78
10856	123456	DIALYSIS	Tunneled	2014Q1	3	1	34	2.941	3.24	1.0000	54

“Check if no events were reported for > 3 consecutive months.”

Check if no dialysis events were reported due to a misunderstanding of the Dialysis Event Protocol or difficulty performing surveillance.

1. Run the “Line Listing – Frequency of Dialysis Events” report to see if there are months when zero dialysis events were reported by your facility.
2. Compare the report to your facility’s records and check if any dialysis events were missed:
 - a) IV antimicrobial starts
 - b) Pus, redness, or swelling at the vascular access site
 - c) Positive blood cultures
3. If necessary, report Dialysis Event(s) in accordance with the 21-day rule.

“Check reporting no positive blood culture events for > 3 consecutive months in spite of having an above average catheter rate.”

Check if no bloodstream infections were reported but have reported high number of catheter patients. This may be due to a misunderstanding of the Dialysis Event Protocol or difficulty performing surveillance.

1. Run the “Line Listing – Frequency of Dialysis Events” report to check if there are months when zero positive blood cultures were reported by your facility.

2. Compare the report to your facility's records and check if any positive blood cultures were missed. Verify that your facility has identified all reportable positive blood cultures, including those collected within one day after a hospital admission.
3. If necessary, report positive blood cultures in accordance with the 21-day rule.
4. Notify your Network if any corrections were made or if the data were correct.

Several data quality check reports are available under Data Quality in NHSN. Please run these reports and ensure data quality.

Analysis Reports

Expand All Collapse All Search

- Folder: Dialysis Events
- Folder: Prevention Process Measures
- Folder: Central Line Insertion Practices
- Folder: Patient Vaccination
- Folder: Data Quality
 - Folder: Dialysis Event Surveillance
 - Line Listing - Dialysis Events to Review
 - Line Listing - DE 21 Day Rule Checks
 - Line Listing - Percent of Dialysis Events to Review
 - Line Listing - 0 Dialysis Events (Any Type) for 3 Months or More
 - Line Listing - 0 IV Antimicrobial Starts for 3 or More Months
 - Line Listing - 0 Positive Blood Cultures for 3 or More Months
 - Line Listing - 0 Pus, Redness, Swelling Events for 3 or More Months
 - Line Listing - 0 PBCs Collected Outside Clinic for 3 or More Months
- Folder: CMS Reports
- Folder: Advanced
- Folder: My Custom Reports
- Folder: Published Reports

It is important to run these data quality checks to make sure data is reported correctly and point are not lost under ESRD QIP.