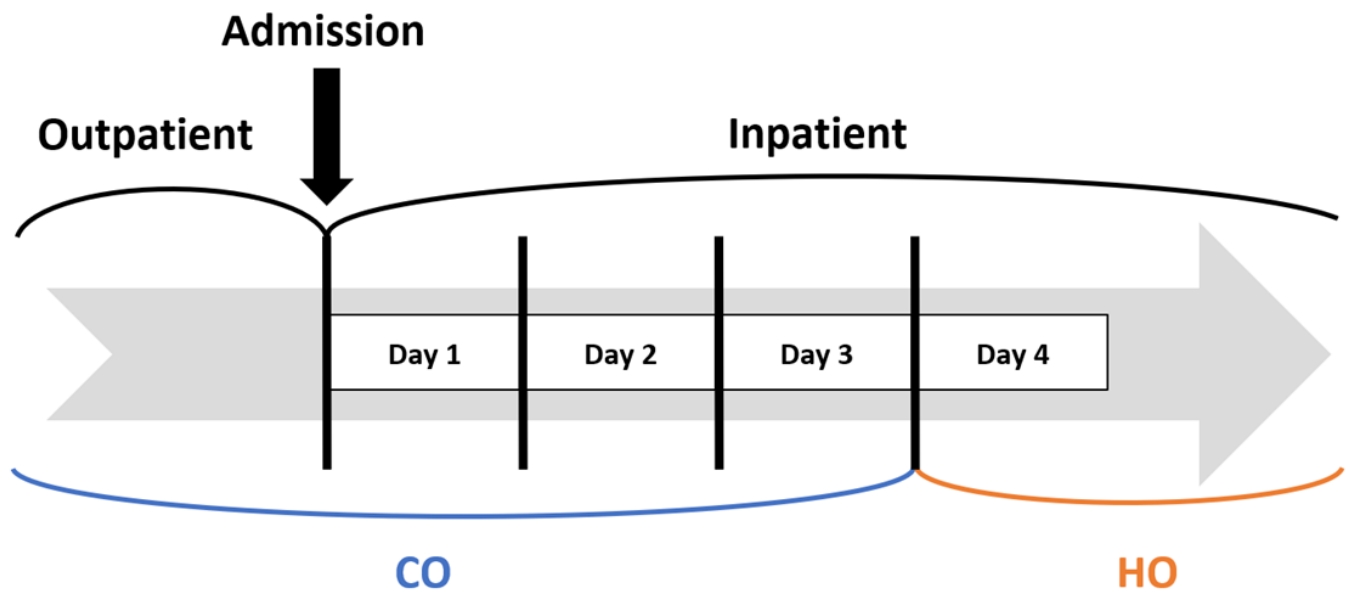


Hospital-onset Positive Culture Incidence by Organism Rate Table

Description

The Hospital-onset Positive Culture Incidence by Organism Rate Table is one of six incidence and prevalence reports for the Antimicrobial Resistance (AR) Option. This report includes a set of tables that display the calculated incidence rates for hospital-onset AR Events reported from all inpatient locations by organism or organism group (also called pathogen or pathogen group), regardless of susceptibility results. NHSN classifies AR Events as hospital-onset (HO) or community-onset (CO) based on the specimen collection date and date of admission (see screenshot below). Facility admission date is considered Day 1. If the specimen was collected in an outpatient location or in an inpatient location on Days 1, 2, or 3, the AR Event is classified as CO. If the specimen was collected in an inpatient location on Day 4 or after, the AR Event is classified as HO. The list of organisms that are eligible for reporting to the AR Option can be found in Appendix F of the [AUR Module Protocol](#).



NHSN calculates the incidence rate per 10,000 patient days for each organism or organism group using the following formula:

$$\text{Incidence rate} = \frac{\# \text{ Hospital-onset AR Events}}{\# \text{ Patient Days}} \times 10,000$$

The default settings for the Hospital-onset Positive Culture Incidence by Organism Rate Table produce a report by quarter, but users can make modifications to display the data by half-year, year, or cumulative time periods. Users do not have the option to run the report by month. Additionally, NHSN includes rates by individual specimen source (blood, cerebrospinal fluid [CSF], lower respiratory specimen [LRS], urine, and skin, soft tissue, wound and musculoskeletal [SSTWM]) and a combined



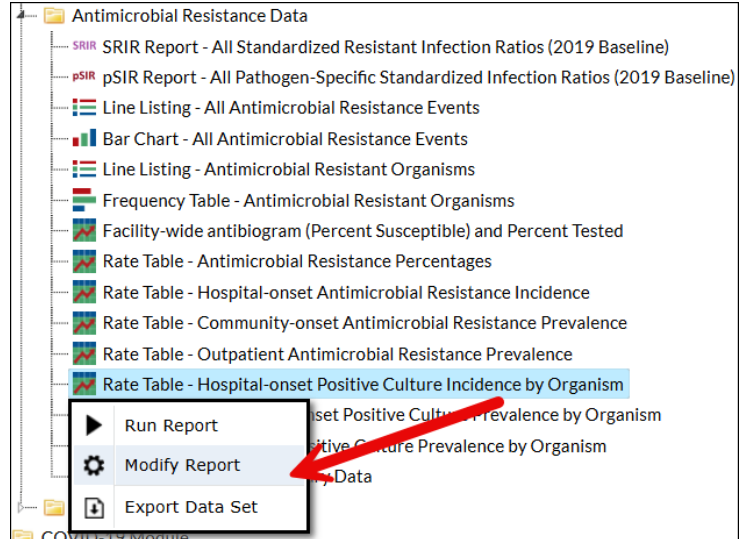
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rate for all specimen sources in the report by default, for a total of six rates per table. The default option will include several rate tables, one for each organism or organism group.

Example

Suppose you want to review the incidence rates for hospital-onset *Acinetobacter* spp. for 2023-2024 by quarter for your facility.

After generating data sets, to run the report, click Analysis > Reports > Antimicrobial Use and Resistance Module > Antimicrobial Resistance Data. After selecting the report, “Rate Table – Hospital-onset Positive Culture Incidence by Organism” in this case, 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.

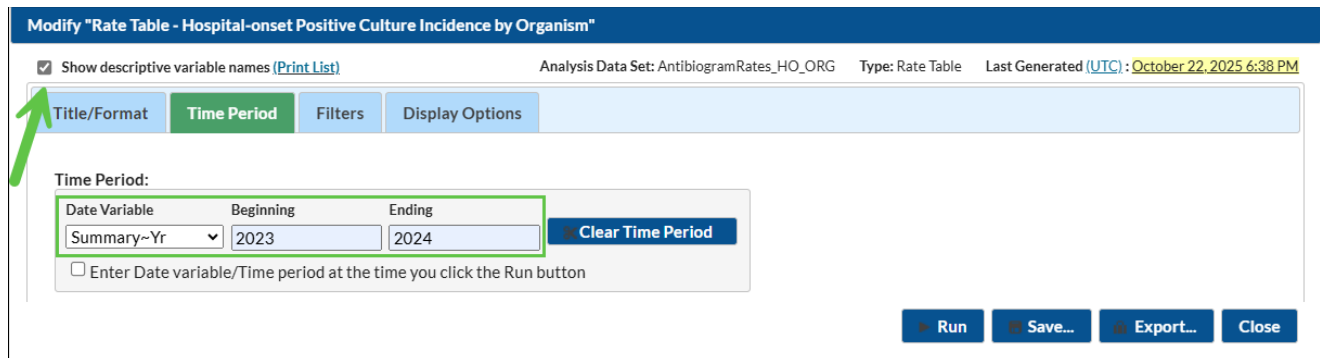


Modifying the Report

For a general, step-by-step explanation of the NHSN modification screen, please refer to this [How to Modify a Report document](#).

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. To filter the data by time period, choose the “Time Period” tab at the top of the page. To display data for 2023-2024, select Summary~Yr with a beginning date of 2023 and an ending date of 2024.

Tip: For more descriptive variable labels on your report, check the box “Show descriptive variable names” that appears near the top of the modification window (recommended).



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The “Display Options” tab allows you to pick how you’d like the tables displayed in your final report. For this example, we’d like the tables to display by quarter, which is the default option. Make sure Summary~Yr/Qtr is selected as the Group by value.

The screenshot shows a web interface titled "Modify 'Rate Table - Hospital-onset Positive Culture Incidence by Organism'". It includes a header with "Show descriptive variable names (Print List)", "Analysis Data Set: AntibioqramRates_HO_ORG", "Type: Rate Table", and "Last Generated (UTC): October 22, 2025 6:38 PM". Below the header are four tabs: "Title/Format", "Time Period", "Filters", and "Display Options" (which is active). Under "Display Options", there is a "Rate Table Options:" section with a "Group by:" dropdown menu set to "Summary~Yr/Qtr". At the bottom right are buttons for "Run", "Save...", "Export...", and "Close".

Final Report

The example rate table shown below is the result of the modifications shown in this document. The report will display several rate tables; scroll down to the *Acinetobacter* table.

Note: This example uses fictitious data for illustrative purposes only.

National Healthcare Safety Network
Rate Table for Incidence of Hospital-onset Organism-specific Events (per 10,000 patient days)
As of: October 28, 2025 at 2:28 PM UTC
 Date Range: ANTIBIOGRAMRATES_HO_ORG summaryYr: 2023 to 2024

orgID=33617 pathogenGroup=Acinetobacter

Pathogen	summaryYQ	Patient Days	Blood Count	Blood Incidence Rate	CSF Count	CSF Incidence Rate	LRS Count	LRS Incidence Rate	Urine Count	Urine Incidence Rate	SSTWM Count	SSTWM Incidence Rate	All Specimen Type Count	All Specimen Type Incidence Rate
Acinetobacter	2023Q1	4700	0	0.00	0	0.00	4	8.51	5	10.64	0	0	9	19.15
Acinetobacter	2023Q2	7106	0	0.00	1	1.41	3	4.22	0	0.00	0	0	4	5.63
Acinetobacter	2023Q3	4821	4	8.30	0	0.00	2	4.15	0	0.00	0	0	6	12.45
Acinetobacter	2023Q4	7555	0	0.00	0	0.00	0	0.00	0	0.00	0	0	0	0.00
Acinetobacter	2024Q1	5250	8	15.24	0	0.00	5	9.52	0	0.00	0	0	13	24.76
Acinetobacter	2024Q2	10421	0	0.00	0	0.00	1	0.96	4	3.84	0	0	5	4.80
Acinetobacter	2024Q3	22994	8	3.48	0	0.00	6	2.61	0	0.00	0	0	14	6.09
Acinetobacter	2024Q4	7681	4	5.21	3	3.91	17	22.13	4	5.21	0	0	28	36.45

1. Incidence: number of hospital-onset AR Events / patient days * 10,000.
 2. Includes all Acinetobacter species reported to the NHSN AR Option.
 Data contained in this report were last generated on October 28, 2025 at 2:24 PM UTC to include all data.

1. The title of the report specifies which rates are being displayed. Here, we are looking at the incidence of hospital-onset organism-specific events (per 10,000 patient days).
2. NHSN prints out the Facility Organization ID and the organism or organism group being displayed in each table. In this example, we are looking at the rates for hospital-onset *Acinetobacter* spp. The first column in the table (Pathogen) also displays the organism or organism group.
3. The second column in the table specifies the time period. In the modifications screen, we filtered the time period to only include data from 2023 and 2024, and we specified the report to group the data by quarter. Each row in the table represents one quarter starting with 2023Q1 and ending with 2024Q4.
4. The third column in the table specifies the denominator of the rates. For the AR hospital-onset incidence rates, the denominator is patient days. In this example as shown in the green box, patients contributed 7,681 patient days for all facility inpatient locations in 2024Q4.
5. Each table will include the number of hospital-onset AR Events isolated from each of the five specimen sources (blood, CSF, LRS, urine, and SSTWM) as well as a combined count for all specimen sources. In 2024Q4, there were four *Acinetobacter* spp. isolated from blood, three from CSF, 17 from LRS, four from urine, and none from SSTWM for a total of 28 *Acinetobacter* spp. reported to the AR Option.



6. Each table will include rates for each of the five specimen sources (blood, CSF, LRS, urine, and SSTWM) as well as a combined rate for all specimen sources. In 2024Q4, the rate of hospital-onset *Acinetobacter* spp. isolated from blood was 5.21 events per 10,000 patient days. The rates per 10,000 patient days were 3.91 for CSF, 22.13 for LRS, and 5.21 for urine. The rate for SSTWM was 0.00 since no events were isolated from SSTWM. The overall incidence rate of hospital-onset *Acinetobacter* spp. from all specimen sources in 2024Q4 was 36.45 events per 10,000 patient days.
7. In the footnotes, you will find the formula for calculating incidence as well as which organisms are included in the group if there are more than one species. This example includes all *Acinetobacter* spp. reported to the NHSN AR Option. Incidence = number of hospital-onset AR Events / patient days x 10,000.

Note: If denominator data (*i.e.*, patient days, admissions, encounters) are not reported for a month, but AR Events were reported for that month, then the AR Events for that month will be excluded from the counts and rates for the rollup (*e.g.*, quarter, half-year, year, cumulative). If denominator data (*i.e.*, patient days, admissions, encounters) are not reported for all three months in a quarter, all six months in a half-year, all 12 months in a year, or at all (cumulative), but AR Events were reported for that time period, then the AR Events will be included in the counts, but both the denominator and rates will be suppressed/appear missing (‘.’).

Additional Resources

- [AR Option Incidence and Prevalence Reports Session from the 2023 NHSN Annual Training: Slides | Recording](#)
- [How to Export Data from NHSN](#)
- [AUR Module Protocol](#)
- [AUR Training](#)
- [NHSN Analysis Quick Reference Guides](#)



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