

AU Rate Table - Locations

Description

Rate tables for the AU option display a facility's calculated rate of antimicrobial use. Report options include rates of use for facility-wide (FACWIDEIN) or by location. Rates can be calculated by drug category and class, for specific drugs within separate classes (modified Selected Drugs option), or for individual drugs (modified Selected Drugs option).

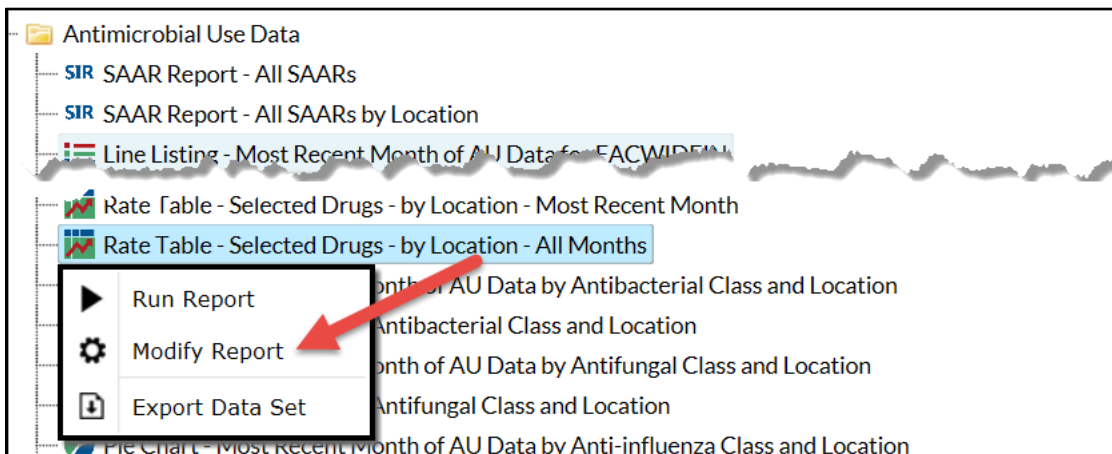
For a more basic explanation of the NHSN modification screen, refer to this document:

<https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/howtomodifyreport.pdf>.

Example (Using: Rate Table – Selected Drugs – by Location – All Months)

You would like to create a rate table for Ceftriaxone use reported from October 2014 through March 2015 for the pediatric medical ward location (PEDMED). You would like to see separate Ceftriaxone rates for each month during this time period.

After generating datasets, to run a rate table report, click Analysis > Reports > Antimicrobial Use and Resistance Module > Antimicrobial Use Data. After selecting the rate table report you want, in this case, "Rate Table – Selected Drugs – by Location – All Months," a pop-up box will appear that will allow you to "Run Report," "Modify Report," and "Export Data Set." Select "Modify Report" to customize your report.



Modifying the 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.

To filter the data by time period, choose the "Time Period" tab at the top of the page. In this example, we have limited the report to October 2014 through March 2015.

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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).

The screenshot shows the 'Modify "Rate Table - Selected Drugs - by Location - All Months"' window. At the top, there is a header bar with the title. Below it, a checkbox labeled 'Show descriptive variable names (Print List)' is checked. To the right, it says 'Type: Rate Table' and 'Data Set Generated On: 02/16/2017 13:51:00'. There are four tabs: 'Title/Format', 'Time Period' (which is highlighted in green), 'Filters', and 'Display Options'. Under the 'Time Period' tab, there is a section titled 'Time Period:' with three input fields: 'Date Variable' (set to 'Summary Year/Month'), 'Beginning' (set to '10/2014'), and 'Ending' (set to '03/2015'). There is a 'Clear Time Period' button to the right. Below these fields is a checkbox labeled 'Enter Date variable/Time period at the time you click the Run button'. At the bottom of the window are four buttons: 'Run', 'Save...', 'Export...', and 'Close'.

The “Filters” tab allows you to further filter the data that will be displayed in the report. For our example, we want to filter the report to only show data for the pediatric medical ward location and for antimicrobial agent Ceftriaxone. First, select the variable “Location” from the drop-down menu, set the operator to “equal” then select the value “PEDMED – PED MED WARD-AU”. Next, click “Add rule” to add an additional filter. Then select the variable “Antimicrobial Agent~Description” from the drop-down menu, set the operator to “equal” and select the value “CEFTRX - Ceftriaxone”.

The screenshot shows the same 'Modify "Rate Table - Selected Drugs - by Location - All Months"' window, but with the 'Filters' tab highlighted in green. At the top, the 'Show descriptive variable names (Print List)' checkbox is still checked. The 'Additional Filters:' section has a 'Show' button and a 'Clear' button. Below this, there are two filter rules. The first rule is for 'Location' with the operator 'equal' and the value 'PEDMED - PED MED WARD-AU'. The second rule is for 'Antimicrobial Agent~Description' with the operator 'equal' and the value 'CEFTRX - Ceftriaxone'. Each rule has a 'Delete' button. There are also 'AND OR' buttons for grouping rules and an 'Add rule' button. At the bottom of the window are four buttons: 'Run', 'Save...', 'Export...', and 'Close'.



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Tip: For including more than one item in each filter such as multiple locations or multiple antimicrobial agents, the “in” operator can be used instead of the “equal” operator.

The “Display Options” tab allows you to view your rates by month, by year, by half-year, by quarter, or cumulative for the entire time period selected. Summary Year/Month is used in this example to show monthly Ceftriaxone usage rates.

The screenshot shows a software interface titled "Modify 'Rate Table - Selected Drugs - by Location - All Months'". At the top left, there is a checked checkbox for "Show descriptive variable names (Print List)" and a timestamp "Data Set Generated On: 02/16/2017 13:51:00". Below this is a horizontal menu with four tabs: "Title/Format", "Time Period", "Filters", and "Display Options", with the last one highlighted in green. Under the "Display Options" tab, there is a section labeled "Rate Table Options:" containing a "Group by:" dropdown menu currently set to "Summary Year/Month". At the bottom of the interface are four buttons: "Run", "Save...", "Export...", and "Close".

Final Report

The example rate table below is the result of the modifications shown in this document. Location-specific rate tables will be shown using the location-specific days present counts for the denominator. The output below shows a rate table for Ceftriaxone use from October 2014 through March 2015, displayed by month for the pediatric medical ward, PEDMED.

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**National Healthcare Safety Network
Rate Table - Selected Drugs from All AU Data - Antimicrobial Utilization Rates by Location
Rate per 1,000 Days Present**

As of: February 9, 2017 at 11:33 AM
Date Range: AU DRUGRATE SLOCATION summaryYM 2014M10 to 2015M03
if (((location = "PEDMED") AND (drugIngredientDesc = "CEFTRX")))

Facility Org ID=13860 CDC Location=IN:ACUTE:WARD:M_PED Location=PEDMED

Summary	Year/Month	Antimicrobial Days	Days Present	Rate per 1000 Days Present
1	2014M10	20	1150	17.39
	2014M11	28	1196	23.41
	2014M12	13	1180	11.02
	2015M01	29	1171	24.77
	2015M02	21	1152	18.23
	2015M03	27	1130	23.89

1. In October (2014M10), this location reported 20 Ceftriaxone antimicrobial days and a total of 1150 days present.
 - a. Dividing 20 (numerator) by 1150 (denominator) and multiplying by 1000 gives this location a Ceftriaxone Antimicrobial Utilization rate of 17.39 per 1000 days present for October 2014.

Additional Resources

Introduction to NHSN Analysis: <https://www.cdc.gov/nhsn/pdfs/training/2016/analysis-data-quality-parikh.pdf>

How to Export Data from NHSN: <http://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/exportdata.pdf>

AUR Module Protocol: <http://www.cdc.gov/nhsn/pdfs/pscmanual/11pscaurcurrent.pdf>

Surveillance for Antimicrobial Use Option: <http://www.cdc.gov/nhsn/acute-care-hospital/aur/>

