AU Pie Chart

Description

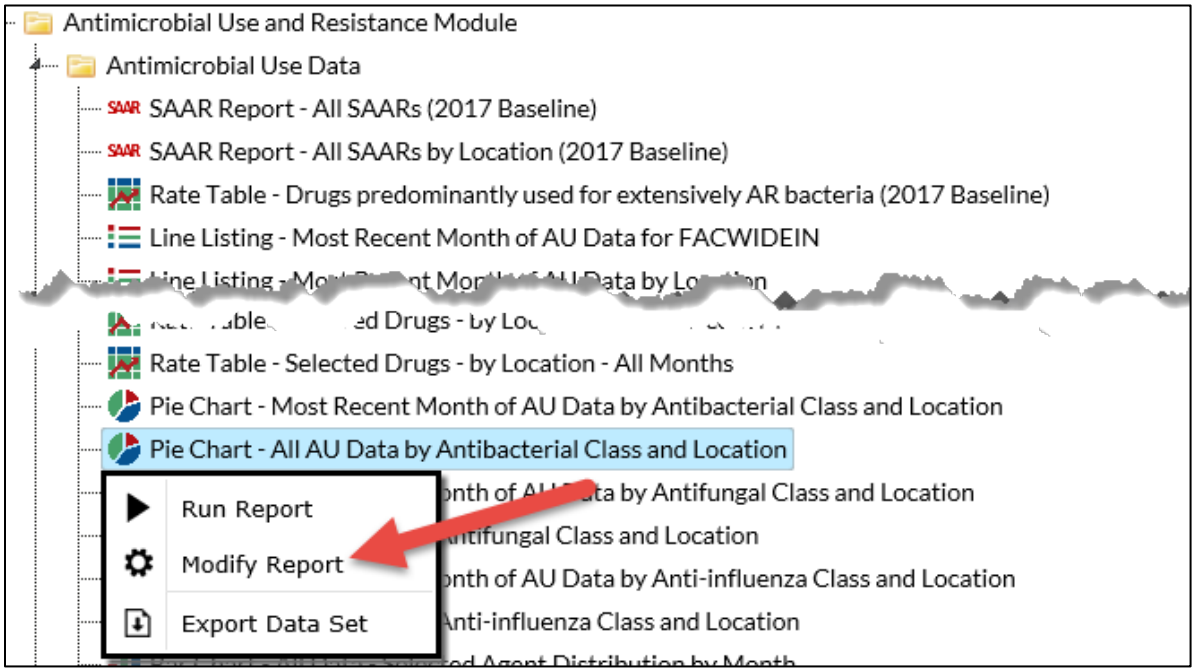
A pie chart is a graphical representation of data. The different slices of the pie represent different values of a variable, with the relative size of the slice representing the amount of data included in the slice.

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 (Pie Chart - All AU Data by Antibacterial Class and Location)

You would like to create a pie chart showing the proportion of antimicrobial days per antibacterial class for one ward location, "4MICU", for the second half of 2017.

After generating data sets, to run a Pie Chart report, click Analysis > Reports > Antimicrobial Use and Resistance Module > Antimicrobial Use Data. After selecting the report, in this case, "Pie Chart – All AU Data by Antimicrobial Class and Location," 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

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.

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 pie chart to include only antimicrobial use in the second half of 2017 (Summary Yr/Half = 2017H2).

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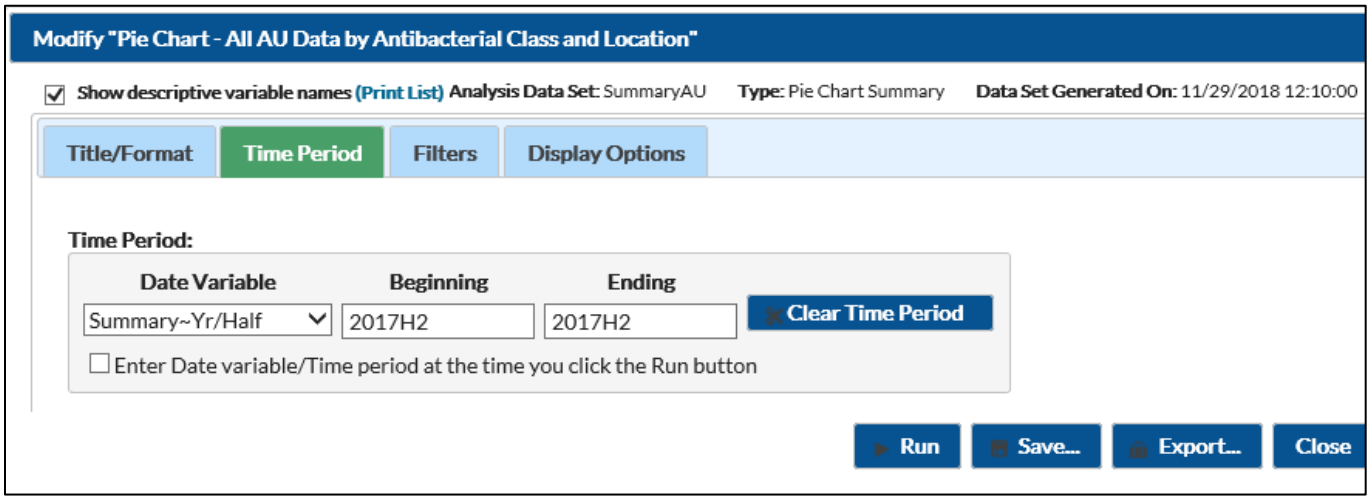
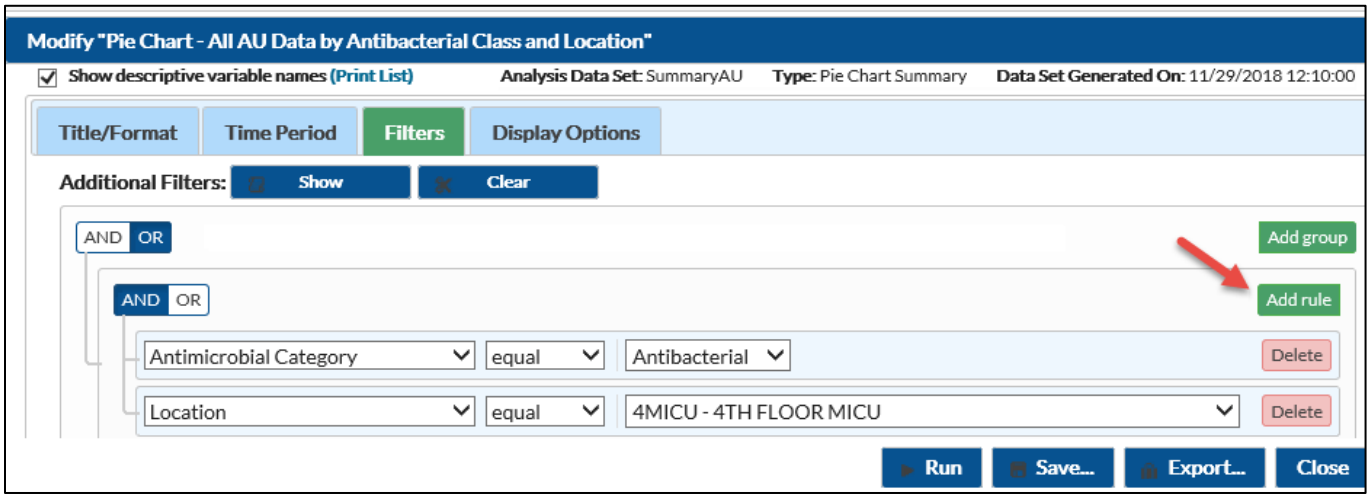
Tip: *For more descriptive variable labels on your report, check the box "Show descriptive variable names" that appears near the top of the modification window (recommended).*



The "Filters" tab allows you to further filter the data that will be displayed in the report. Each addition of "group" and "rule" will allow you to specify values. After selecting a variable to filter, select the operator (i.e., "equal") then specify desired values of that variable that should be included in the report. By selecting "Add rule," you can filter by location. In this example, we have limited the pie chart to include antibacterial use from a single location (location=4MICU).



The "Display Options" tab allows you to view your report organized by specific criteria. The "chart variable" is the variable that will make up the slices of the pie. Different pies will be created for each value of the "stratification variable". In this case, we wish to look at the distribution of each antibacterial class within each location. Separate pages of output will be created based on values of the "page by" variable. You can also choose the number and orientation of pies on a page and where to place various descriptive statistics.

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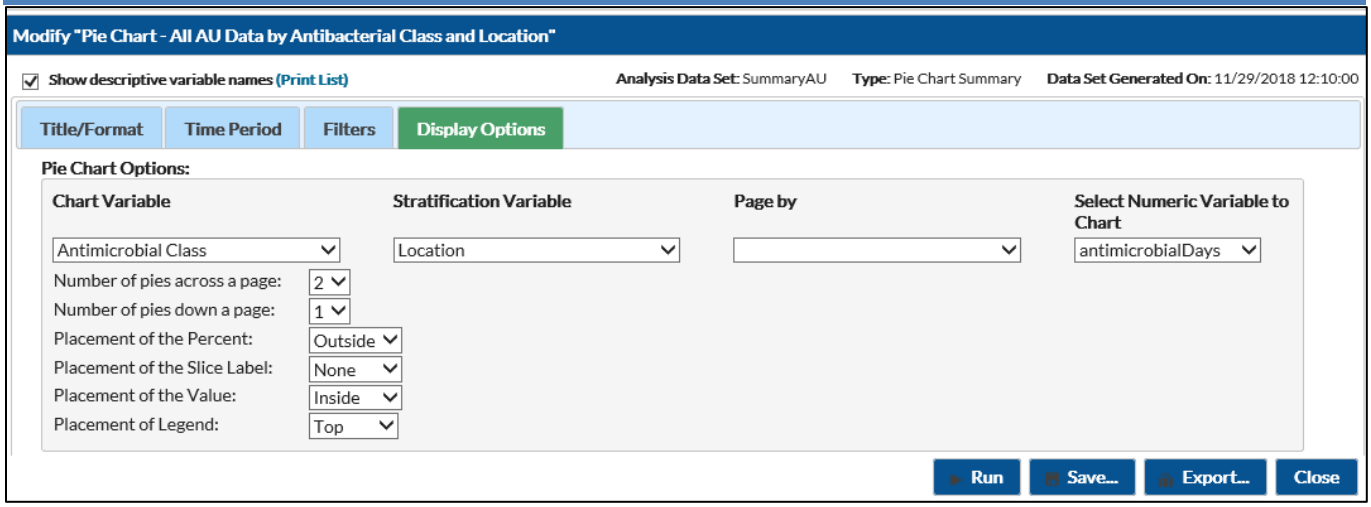

Final Report

In this example, due to the specific modification made to show only 4MICU, only one pie chart is displayed. The percentage on the outside of each pie slice corresponds to the percentage that particular class contributes to total antibacterial use. For example, 11.11% of antibacterial days in the second half of 2017 were Glycopeptides. The value on each slice itself is the number of antimicrobial days for that class during the second half of 2017, for the 4MICU location. In this example, there were 209 Cephalosporin days of therapy during the second half of 2017 for the 4MICU location.

***Tip**: Reference Appendix B in the NHSN AUR Module Protocol for a list of antimicrobials and their associated class and subclass.*

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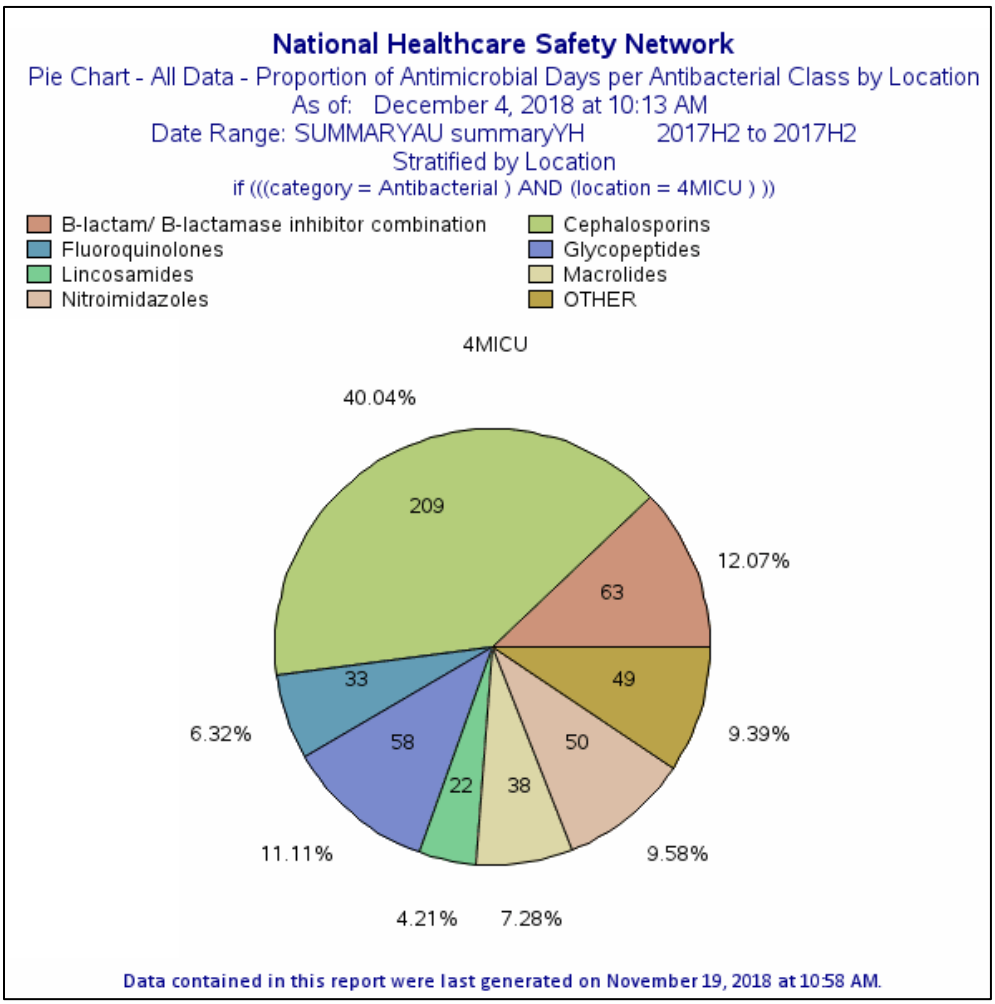
Note: This example uses fictitious data for illustrative purposes only.



Additional Resources

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

Introduction to NHSN Analysis: https://www.cdc.gov/nhsn/pdfs/training/2018/intro-to-analysis-508.pdf

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

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