



NHSN Antimicrobial Use Option – Beginner Analysis

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Objectives

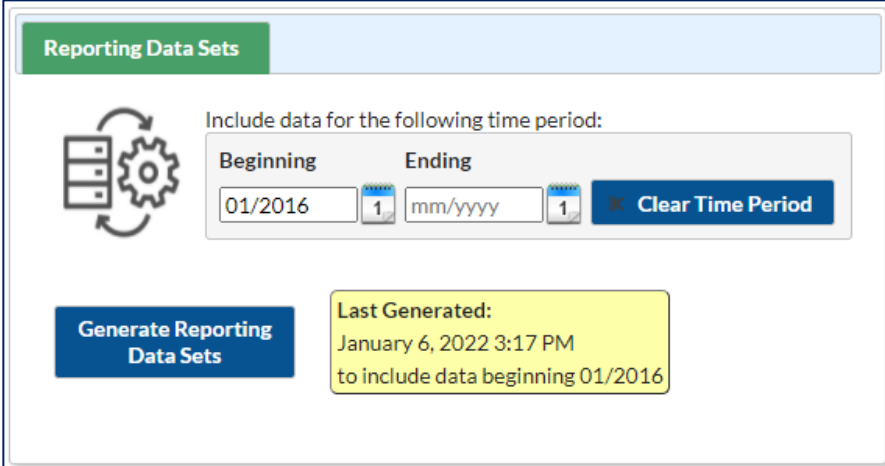
You will learn how to...

- Generate data sets with and without timeboxing
- Create and modify Antimicrobial Use (AU) analysis reports:
 - Line List
 - Rate Table
 - Bar Chart
- Export reports with and without modifications
- Use various resources for the AU Option

Generating Data Sets

Generating Data Sets

- Newly uploaded data do not appear until you generate new data sets
- Your data set is a snapshot of data currently in your NHSN facility
- Each NHSN user has their own data sets — you may not see the same data as your coworkers















The screenshot displays the 'Reporting Data Sets' interface. At the top, there is a green header with the text 'Reporting Data Sets'. Below the header, on the left, is an icon of a server rack with a gear and a circular arrow, indicating a refresh or generation process. To the right of the icon, the text reads 'Include data for the following time period:'. Below this text are two input fields: 'Beginning' with the value '01/2016' and 'Ending' with the value 'mm/yyyy'. Both fields have a calendar icon to their right. To the right of the 'Ending' field is a blue button labeled 'Clear Time Period'. Below the time period selection area is a large blue button labeled 'Generate Reporting Data Sets'. To the right of this button is a yellow box labeled 'Last Generated:' containing the text 'January 6, 2022 3:17 PM to include data beginning 01/2016'.

Timeboxing

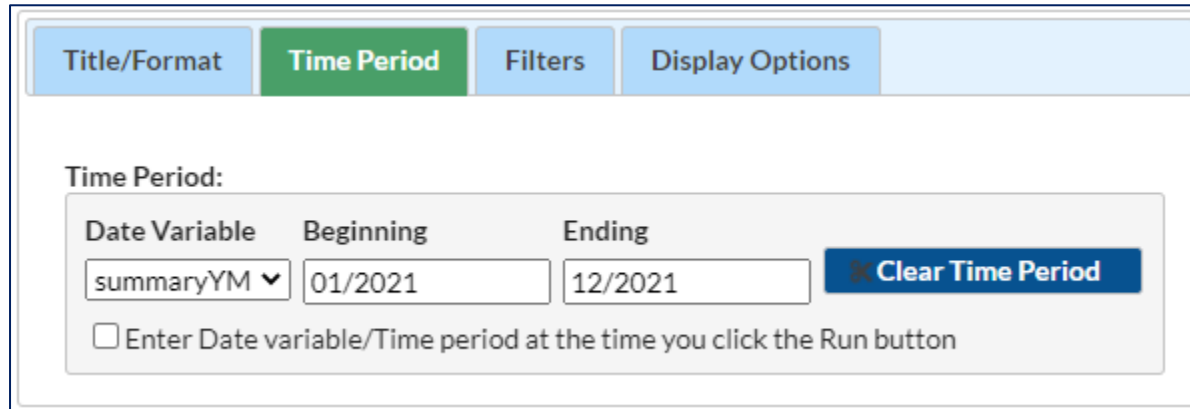
- For quality reporting programs, you can use “timeboxing” to “freeze” your NHSN data at a specific point in time
- Survey data are not limited by timeboxing; all surveys completed by your facility are included, regardless of survey year

Timeboxing Examples

1	<p>Include data for the following time period:</p> <p>Beginning Ending</p> <p>01/2019  1 03/2019  1 </p>	<p>Both beginning and ending = nonblank Will include all data within the time period specified (for example, 01/01/19 thru 03/31/19)</p>
2	<p>Include data for the following time period:</p> <p>Beginning Ending</p> <p>01/2016  1 mm/yyyy  1 </p>	<p>Ending date = blank Will include all data from beginning date specified (01/2016) through present day</p>
3	<p>Include data for the following time period:</p> <p>Beginning Ending</p> <p>mm/yyyy  1 12/2018  1 </p>	<p>Beginning date = blank Will include all data through ending date specified (12/2018)</p>
4	<p>Include data for the following time period:</p> <p>Beginning Ending</p> <p>mm/yyyy  1 mm/yyyy  1 </p>	<p>Both beginning and ending = blank Will include all data reported, regardless of time period</p>

Instead of Timeboxing

- Recommend using the Time Period settings on the analysis reports modification screen instead



The screenshot shows a web interface for configuring analysis reports. At the top, there are four tabs: 'Title/Format', 'Time Period' (which is highlighted in green), 'Filters', and 'Display Options'. Below the tabs, the 'Time Period' section is visible. It contains a 'Date Variable' dropdown menu set to 'summaryYM', a 'Beginning' date field with '01/2021', and an 'Ending' date field with '12/2021'. To the right of these fields is a blue button labeled 'Clear Time Period'. Below the date fields, there is a checkbox labeled 'Enter Date variable/Time period at the time you click the Run button' which is currently unchecked.

- More information about generating data sets and timeboxing:
<https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/generateddatasets-psc-508.pdf>

AU Option Analysis Report – Line List

Line Lists

- Organized, detailed list of each record entered into NHSN
- Can be used by both facilities and groups
- Variables on display:
 - Patient care locations
 - Month
 - Total days present
 - Total antimicrobial days by route of administration (e.g., IV [intravenous], IM [intramuscular], digestive, and respiratory)

Line List Options

- Click Analysis then Reports
- On the Analysis Reports page:
 - Antimicrobial Use and Resistance Module
 - Antimicrobial Use Data
- Four Line List reports

The screenshot displays the NHSN Home navigation menu on the left and the Analysis Reports page on the right. The 'Analysis' menu item is highlighted in green. In the Analysis Reports page, the 'Antimicrobial Use and Resistance Module' is highlighted with a red box, and a red arrow points to the 'Antimicrobial Use Data' sub-menu. A dropdown menu is open under 'Antimicrobial Use Data', showing four line list reports highlighted in yellow:

- Line Listing - Most Recent Month of AU Data for FACWIDEIN
- Line Listing - Most Recent Month of AU Data by Location
- Line Listing - All Submitted AU Data for FACWIDEIN
- Line Listing - All Submitted AU Data by Location

Line Listing – Most Recent Month of AU Data by Location

The screenshot displays the NHSN Analysis Reports interface. On the left is a navigation menu with the following items: NHSN Home, Alerts, Dashboard, Reporting Plan, Patient, Event, Procedure, Summary Data, COVID-19, Import/Export, Surveys, Analysis (highlighted in green), Users, Facility, Group, and Logout. The main content area is titled 'Analysis Reports' and contains a tree view of report categories. A red arrow points to the 'Antimicrobial Use Data' folder, which is expanded to show a list of reports. The 'Reports' sub-menu is also expanded, and the report 'Line Listing - Most Recent Month of AU Data by Location' is highlighted in yellow.

Analysis Reports

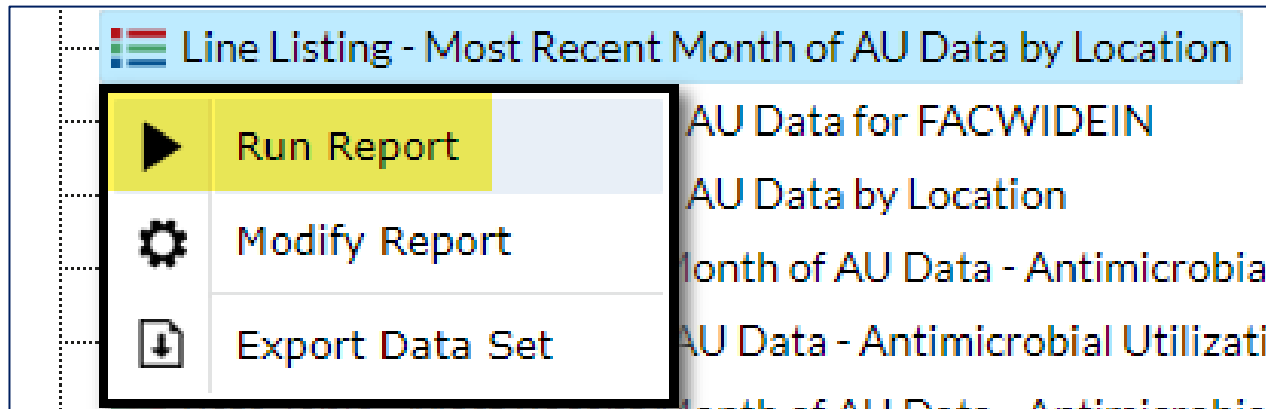
Expand All Collapse All Search

- Device-Associated (DA) Module
- Procedure-Associated (PA) Module
- HAI Antimicrobial Resistance (DA+PA Modules)
- Antimicrobial Use and Resistance Module
 - Antimicrobial Use Data
 - SAAR SAAR Report - All Adult and Ped SAARs (2017 Baseline)
 - SAAR SAAR Report - All Adult and Ped SAARs by Location (2017 Baseline)
 - SAAR SAAR Report - All Neonatal SAARs (2018 Baseline)
 - SAAR SAAR Report - All Neonatal SAARs by Location (2018 Baseline)
 - Rate Table - Drugs Predominantly Used for Extensively AR Bacteria (2017 Baseline)
 - Rate Table - Select Antimicrobial Groupings for Neonatal Units (2018 Baseline)
 - Line Listing - Most Recent Month of AU Data for FACWIDEIN
 - Line Listing - Most Recent Month of AU Data by Location**
 - Line Listing - All Submitted AU Data for FACWIDEIN
 - Line Listing - All Submitted AU Data by Location
 - Rate Table - Most Recent Month of AU Data - Antimicrobial Utilization Rates for FACWIDEIN
 - Rate Table - All Submitted AU Data - Antimicrobial Utilization Rates for FACWIDEIN

Generate Data Sets Reports Statistics Calculator

Line Listing – Most Recent Month of AU Data by Location: Run Report

- Select the Line Listing – Most Recent Month of AU Data by location
- Click “Run Report” to generate the default report



Line Listing – Most Recent Month of AU Data by Location: Output

- The report will appear in a new tab and display for the most recent month of data reported by location

National Healthcare Safety Network
Line Listing - Most Recent Month of AU Data by Location
 As of: February 17, 2022 at 9:35 AM
 Date Range: All SUMMARYAU1MONTH
 if (((location ~= "FACWIDEIN")))

location=BCC

orgID	summaryYM	drugIngredientDesc	location	antimicrobialDays	numDaysPresent	numAdmissions	IM_Count	IV_Count	digestive_Count	respiratory_Count
33617	2022M01	AMAN - Amantadine	BCC	1	320	.	0	1	.	0
33617	2022M01	AMK - Amikacin	BCC	10	320	.	0	4	0	6
33617	2022M01	AMOX - Amoxicillin	BCC	4	320	.	0	0	4	0
33617	2022M01	AMOXWC - Amoxicillin with Clavulanate	BCC	2	320	.	0	2	0	0
33617	2022M01	AMP - Ampicillin	BCC	3	320	.	0	3	0	0
33617	2022M01	AMPBLIC - Amphotericin B lipid complex	BCC	8	320	.	4	4	.	0
33617	2022M01	AMPH - Amphotericin B	BCC	0	320	.	0	0	0	0
33617	2022M01	AMPHOT - Amphotericin B Liposomal	BCC	0	320	.	0	0	0	0
33617	2022M01	AMPIWS - Ampicillin with Sulbactam	BCC	3	320	.	0	3	0	0
33617	2022M01	ANID - Anidulafungin	BCC	1	320	.	0	1	0	0
33617	2022M01	AZITH - Azithromycin	BCC	3	320	.	0	3	0	0
33617	2022M01	AZT - Aztreonam	BCC	4	320	.	0	4	0	0

Line Listing – Most Recent Month of AU Data by Location: Output continued

- Includes: Facility orgID, month/year, antimicrobial, the number of antimicrobial days, number of days present, and the stratified routes of administration (IM, IV, digestive, respiratory)

National Healthcare Safety Network

Line Listing - Most Recent Month of AU Data by Location

As of: February 24, 2022 at 4:26 PM
 Date Range: All SUMMARYAU1MONTH
 if (((location ~= "FACWIDEIN")))

location=BCC

orgID	summaryYM	drugIngredientDesc	location	antimicrobialDays	numDaysPresent	numAdmissions	IM_Count	IV_Count	digestive_Count	respiratory_Count
33617	2022M01	AMAN - Amantadine	BCC	1	320	.	0	1	.	0
33617	2022M01	AMK - Amikacin	BCC	10	320	.	0	4	0	6
33617	2022M01	AMOX - Amoxicillin	BCC	4	320	.	0	0	4	0
33617	2022M01	AMOXWC - Amoxicillin with Clavulanate	BCC	2	320	.	0	2	0	0

Line Listing – Most Recent Month of AU Data by Location: Interpretation

1. For Amoxicillin, there were 4 antimicrobial days for this location (BCC)
2. There were 320 days present for this location
3. All four antimicrobial days were administered via the digestive route

National Healthcare Safety Network										
Line Listing - Most Recent Month of AU Data by Location										
orgID	summaryYM	location	drugIngredientDesc	antimicrobialDays	numDaysPresent	numAdmissions	IM_Count	IV_Count	digestive_Count	respiratory_Count
33617	2022M01	BCC	AMAN - Amantadine	1	320	.	0	1	.	0
33617	2022M01	BCC	AMK - Amikacin	10	320	.	0	4	0	6
33617	2022M01	BCC	AMOX - Amoxicillin	4	320	.	0	0	4	0
33617	2022M01	BCC	AMOXWC - Amoxicillin with Clavulanate	2	320	.	0	2	0	0
33617	2022M01	BCC	AMP - Ampicillin	3	320	.	0	3	0	0
33617	2022M01	BCC	AMPBLIC - Amphotericin B lipid complex	8	320	.	4	4	.	0

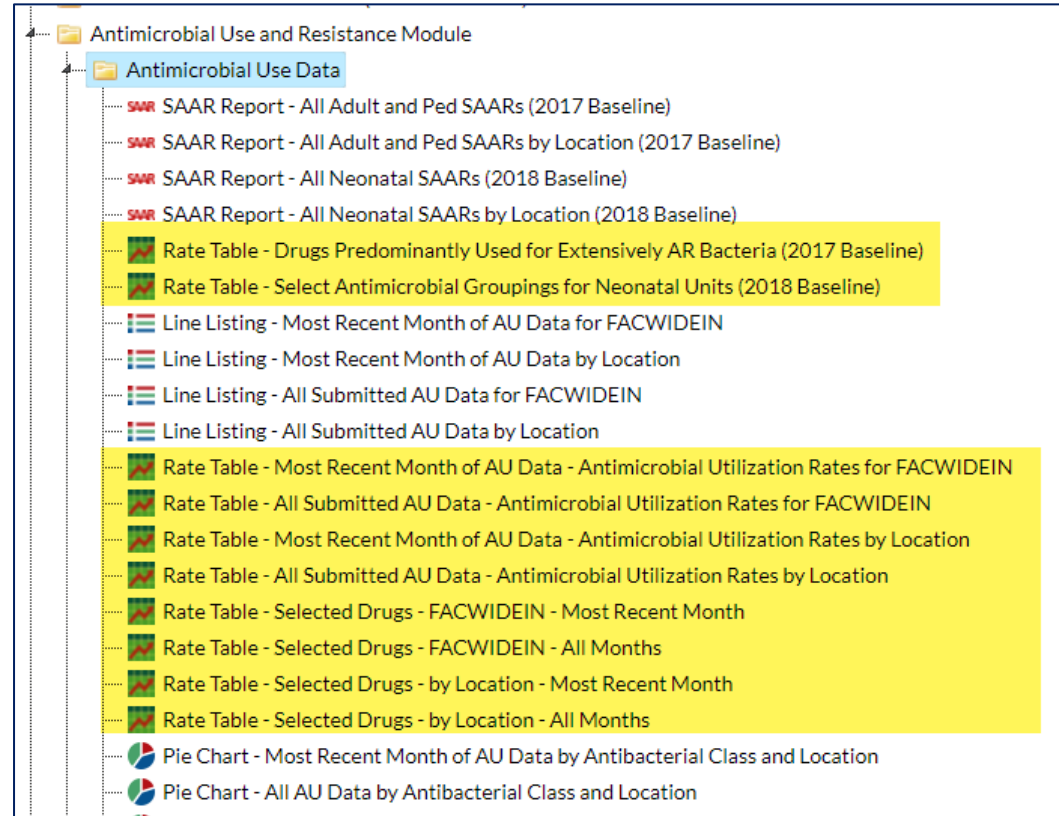
AU Option Analysis Report – Selected Drugs Rate Table

Rate Tables

- AU Option rate tables display the calculated rate of antimicrobial use
- Report options include rates of use for facility-wide inpatient (FACWIDEIN) or by location
- Rates can be calculated for:
 - Drug category and class
 - Individual drugs (modified Selected Drugs option)
 - Specific drugs within same or separate classes (modified Selected Drugs option)
 - E.g., cefepime and ceftazidime - two of the many cephalosporins
 - Different class
 - E.g., Anti-Fungal or Anti-Bacterial

Rate Table Options

- Click Analysis then Reports
- On the Analysis Reports page:
 - Antimicrobial Use and Resistance Module
 - Antimicrobial Use Data
- Several Rate Tables available



Rate Table – Selected Drugs – by Location – Most Recent Month

- Click Analysis then Reports
- On the Analysis Reports page:
 - Antimicrobial Use and Resistance Module
 - Antimicrobial Use Data
 - Rate Table – Selected Drugs – by Location – Most Recent Month

NHSN - National Healthcare Safety Network

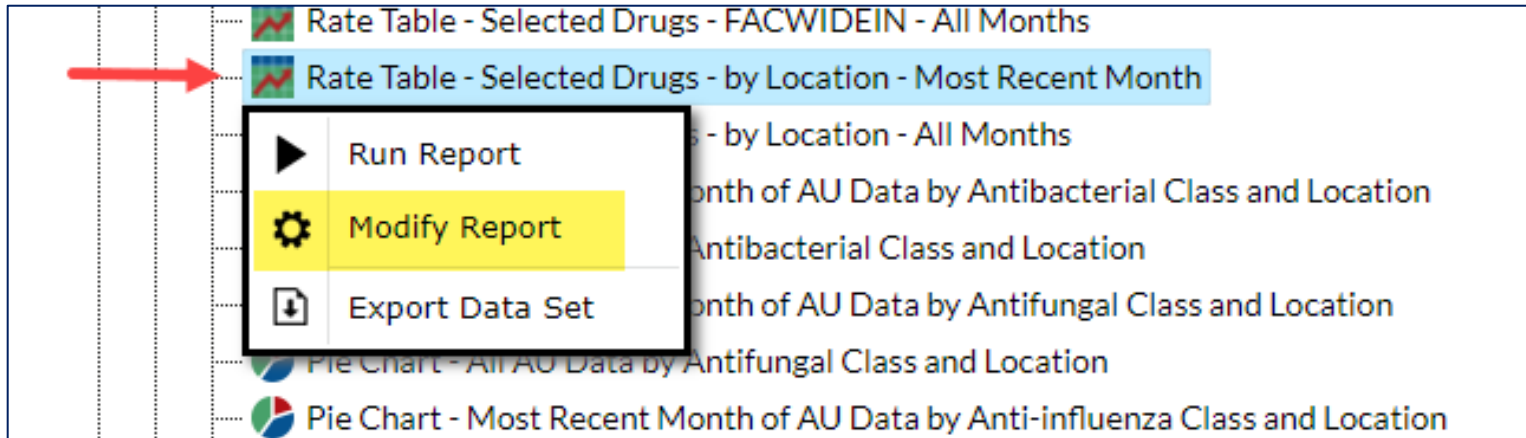
Analysis Reports

Expand All Collapse All Search

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 - Procedure-Associated (PA) Module
 - HAI Antimicrobial Resistance (DA+PA Modules)
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 - Line Listing - All Submitted AU Data by Location
 - Rate Table - Most Recent Month of AU Data - Antimicrobial Utilization Rates for FACWIDEIN
 - Rate Table - All Submitted AU Data - Antimicrobial Utilization Rates for FACWIDEIN
 - Rate Table - Most Recent Month of AU Data - Antimicrobial Utilization Rates by Location
 - Rate Table - All Submitted AU Data - Antimicrobial Utilization Rates by Location
 - Rate Table - Selected Drugs - FACWIDEIN - Most Recent Month
 - Rate Table - Selected Drugs - FACWIDEIN - All Months
 - Rate Table - Selected Drugs - by Location - Most Recent Month
 - Rate Table - Selected Drugs - by Location - All Months
 - Pie Chart - Most Recent Month of AU Data by Antibacterial Class and Location
 - Pie Chart - All AU Data by Antibacterial Class and Location
 - Pie Chart - Most Recent Month of AU Data by Antifungal Class and Location
 - Pie Chart - All AU Data by Antifungal Class and Location

Rate Table – Selected Drugs – by Location – Most Recent Month: Modify Report

- Choose “Modify Report” to generate the rate table for a single drug



Rate Table – Selected Drugs – by Location – Most Recent Month: Making Modifications

- In the Modification box, click on the box on top for “Show descriptive variable names.”
- Select the “Filters” tab. Add a filter for “Antimicrobial Agent ~ Description” “equal” “VANC-Vancomycin”, then click “Run” to run the report.

The screenshot displays the 'Modify "Rate Table - Selected Drugs - by Location - Most Recent Month"' interface. At the top, there is a header bar with the title and a 'Print List' link. Below the header, a navigation bar contains tabs for 'Title/Format', 'Time Period', 'Filters' (highlighted in green), and 'Display Options'. A red box highlights the 'Show descriptive variable names (Print List)' checkbox, which is checked. To the right of the checkbox, the text 'Analysis Data Set: AU_DrugRates1monLocation Type: Rate Table Last Generated: February 11, 2022 8:59 AM' is visible. Below the navigation bar, there are 'Additional Filters:' buttons for 'Show' and 'Clear'. The main filter area contains a tree structure of filter rules. The top level has 'AND' and 'OR' buttons and an 'Add group' button. The first rule in the tree has 'AND' and 'OR' buttons and an 'Add rule' button. The selected rule is 'Antimicrobial Agent ~ Description' (highlighted in yellow) with a dropdown set to 'equal' and another dropdown set to 'VANC - Vancomycin' (highlighted in yellow). A 'Delete' button is located to the right of the rule. At the bottom right, there are buttons for 'Run' (highlighted with a red box), 'Save...', 'Export...', and 'Close'.

Rate Table – Selected Drugs – by Location – Most Recent Month: Interpretation

- Table header displays the drug(s) selected on the modification screen
- Rate table generated for the BCC location and shows 29 Vancomycin antimicrobial days
- In January 2022 the rate of Vancomycin use in the BCC location was 90.63 antimicrobial days per 1000 days present.

National Healthcare Safety Network
Rate Table - Selected Drugs from Most Recent Month of AU Data - Antimicrobial Utilization Rates by Location
Rate per 1,000 Days Present
As of: February 22, 2022 at 9:58 AM
Date Range: All AU_DRUGRATE\$1MONLOCATION
if (((drugIngredientDesc = "VANC")))

Facility Org ID=33617 **CDC Location=IN:ACUTE:CC:B Location=BCC**

Summary Year/Month	Antimicrobial Days	Days Present	Rate per 1000 Days Present
2022M01	29	320	90.63

Any reported use of Colistin will be combined with and reported as Colistimethate. Any reported use of Amikacin Liposomal will be combined with and reported as Amikacin.

AU Option Analysis Report – Bar Chart

Bar Charts

- A bar chart is a graphical representation of data where the length or height of the bars represents counts of records meeting the criteria
- Bar charts can only be produced as HTML output and therefore the results will appear in a pop-up window in your browser
- Report options include:
 - Most recent month or all data
 - Use by antimicrobial category (antibacterial, antifungal, and anti-influenza) and class
 - Selected drugs

Finding Bar Charts

- Click Analysis then Reports
- On the Analysis Reports page:
 - Antimicrobial Use and Resistance Module
 - Antimicrobial Use Data
- The bar charts are at the bottom of the list

The screenshot displays the 'Antimicrobial Use and Resistance Module' interface. On the left is a navigation menu with the following items: Procedure, Summary Data, COVID-19, Import/Export, Surveys, Analysis, Users, Facility, Group, and Logout. The main content area shows a tree view under 'Antimicrobial Use and Resistance Module' with a sub-folder 'Antimicrobial Use Data' expanded. This folder contains a long list of reports, including SAAR reports, Rate Tables, Line Listings, and Pie Charts. The bottom portion of this list, starting with 'Bar Chart - All Data - Selected Agent Distribution by Month' and ending with 'Bar Chart - All AU Data by Anti-influenza Class and Location', is highlighted in yellow. Below this list are two additional folders: 'Antimicrobial Use Data - 2014 Baseline SAARs' and 'Antimicrobial Resistance Data'.

Bar Chart – Most Recent Month of AU Data by Antibacterial Class and Location

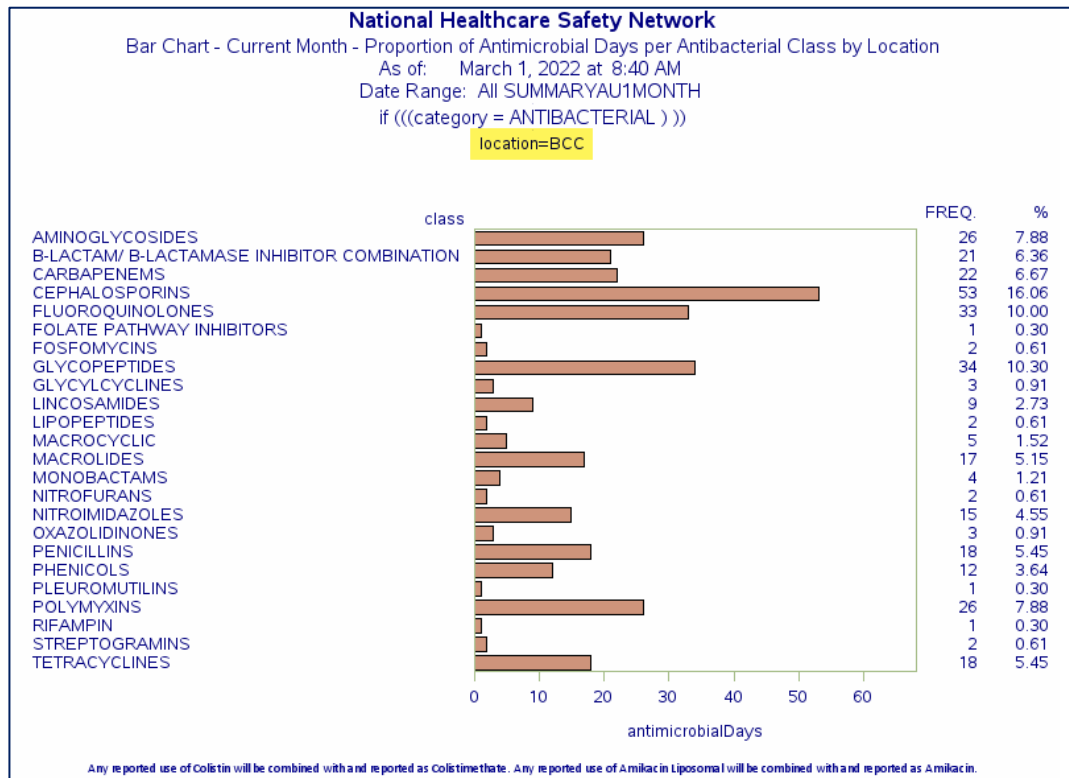
- Click on Analysis then Reports
- On the Analysis Reports page:
 - Antimicrobial Use and Resistance Module
 - Antimicrobial Use Data
 - Bar Chart – Most Recent Month of AU Data by Antibacterial Class and Location

The screenshot displays the 'Antimicrobial Use and Resistance Module' interface. On the left, a navigation menu includes 'Procedure', 'Summary Data', 'COVID-19', 'Import/Export', 'Surveys', 'Analysis', 'Users', 'Facility', 'Group', and 'Logout'. The 'Analysis' menu is expanded, showing 'Generate Data Sets', 'Reports', and 'Statistics Calculator'. The 'Reports' section is active, displaying a list of reports under the 'Antimicrobial Use Data' folder. A red arrow points to this folder. The reports list includes various SAAR reports, rate tables, and pie charts. The report 'Bar Chart - Most Recent Month of AU Data by Antibacterial Class and Location' is highlighted in green.

Report Name
SAAR SAAR Report - All Adult and Ped SAARs (2017 Baseline)
SAAR SAAR Report - All Adult and Ped SAARs by Location (2017 Baseline)
SAAR SAAR Report - All Neonatal SAARs (2018 Baseline)
SAAR SAAR Report - All Neonatal SAARs by Location (2018 Baseline)
Rate Table - Drugs Predominantly Used for Extensively AR Bacteria (2017 Baseline)
Rate Table - Select Antimicrobial Groupings for Neonatal Units (2018 Baseline)
Line Listing - Most Recent Month of AU Data for FACWIDEIN
Line Listing - Most Recent Month of AU Data by Location
Line Listing - All Submitted AU Data for FACWIDEIN
Line Listing - All Submitted AU Data by Location
Rate Table - Most Recent Month of AU Data - Antimicrobial Utilization Rates for FACWIDEIN
Rate Table - All Submitted AU Data - Antimicrobial Utilization Rates for FACWIDEIN
Rate Table - Most Recent Month of AU Data - Antimicrobial Utilization Rates by Location
Rate Table - All Submitted AU Data - Antimicrobial Utilization Rates by Location
Rate Table - Selected Drugs - FACWIDEIN - Most Recent Month
Rate Table - Selected Drugs - FACWIDEIN - All Months
Rate Table - Selected Drugs - by Location - Most Recent Month
Rate Table - Selected Drugs - by Location - All Months
Pie Chart - Most Recent Month of AU Data by Antibacterial Class and Location
Pie Chart - All AU Data by Antibacterial Class and Location
Pie Chart - Most Recent Month of AU Data by Antifungal Class and Location
Pie Chart - All AU Data by Antifungal Class and Location
Pie Chart - Most Recent Month of AU Data by Anti-influenza Class and Location
Pie Chart - All AU Data by Anti-influenza Class and Location
Bar Chart - All Data - Selected Agent Distribution by Month
Bar Chart - Most Recent Month of AU Data by Antibacterial Class and Location
Bar Chart - All AU Data by Antibacterial Class and Location
Bar Chart - Most Recent Month of AU Data by Antifungal Class and Location
Bar Chart - All AU Data by Antifungal Class and Location
Bar Chart - Most Recent Month of AU Data by Anti-influenza Class and Location
Bar Chart - All AU Data by Anti-influenza Class and Location

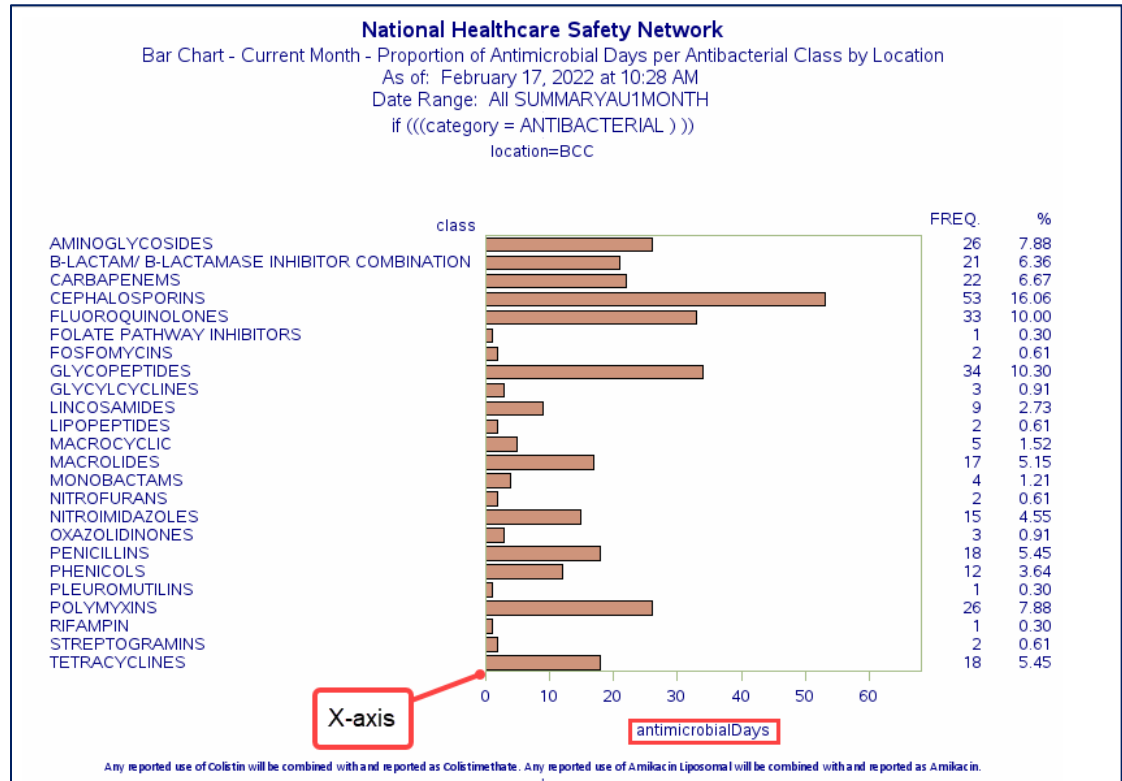
Bar Chart – Most Recent Month of AU Data by Antibacterial Class and Location: Output

- Displays most recent month of data reported by Antibacterial Class and Location
- Displayed in alphabetical order by location



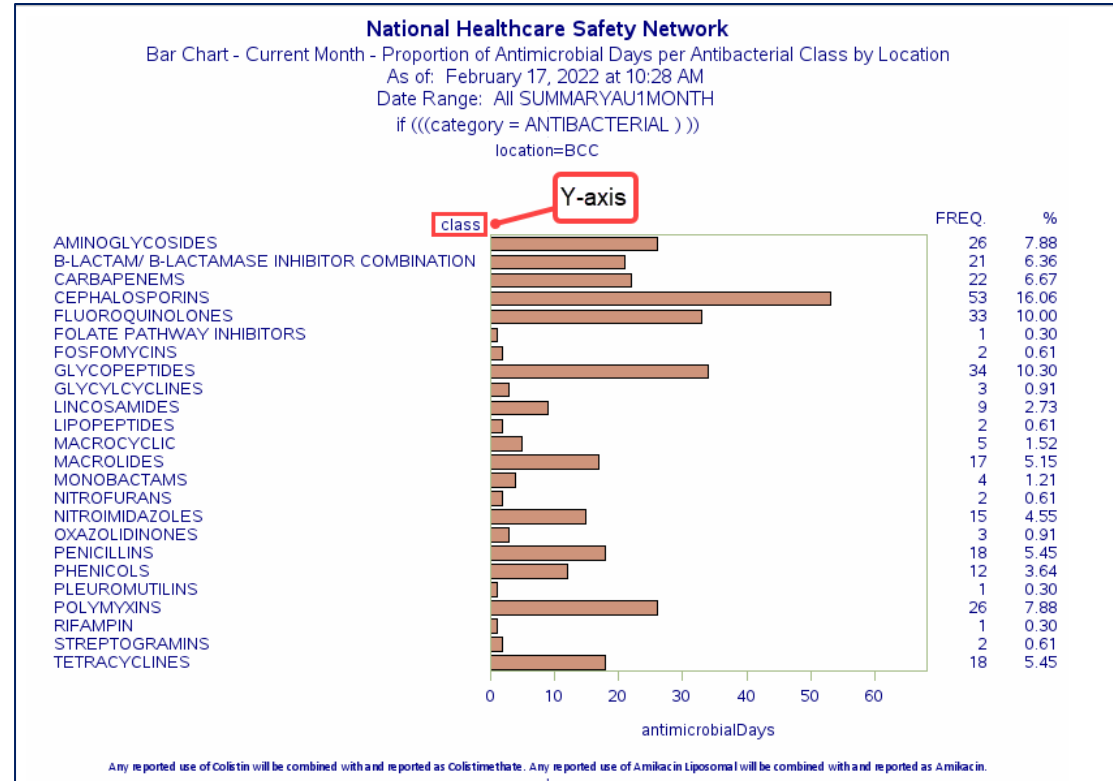
Bar Chart – Most Recent Month of AU Data by Antibacterial Class and Location: X-axis

- The X-axis (antimicrobialDays) is the total number of antimicrobial days and is represented by the length of the bars



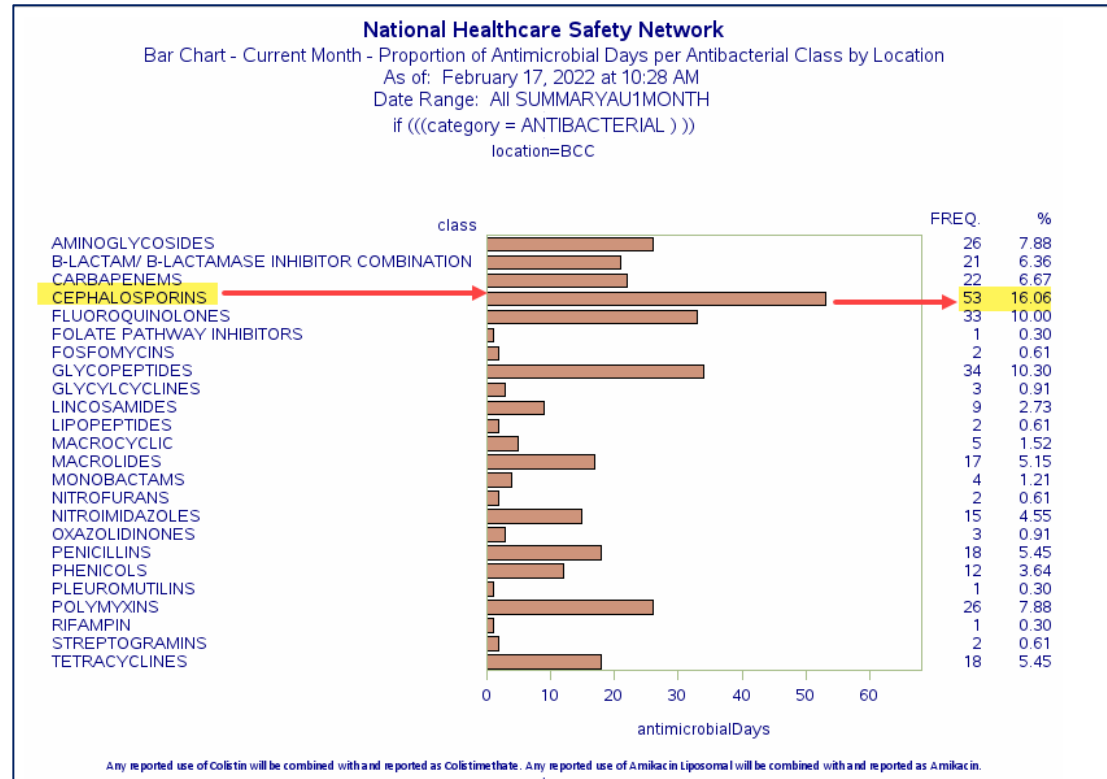
Bar Chart – Most Recent Month of AU Data by Antibacterial Class and Location: Y-axis

- The Y-axis is antimicrobial class (antibacterial class in this example); one bar is displayed alphabetically for each antibacterial class



Bar Chart – Most Recent Month of AU Data by Antibacterial Class and Location: Interpretation

- The longer the bar, the greater number of antimicrobial days contributed by that class of antibacterial.
- Cephalosporins represented the greatest number of antimicrobial days (53) which was approximately 16% of all antibacterial therapy in this location/month.



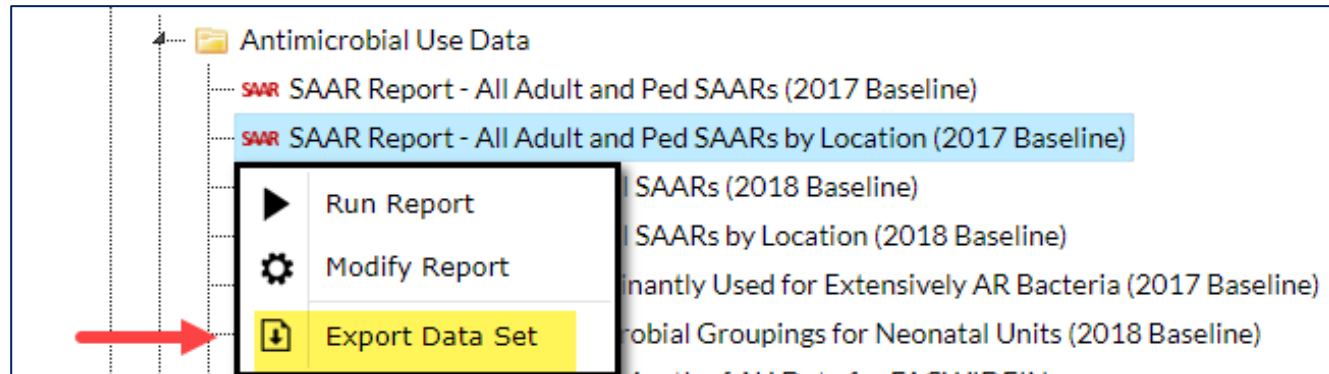
Exporting Data Sets

Exporting Data Sets

- You may want to work with the data outside of NHSN application.
- Users can export data:
 - Entire analysis data set
 - Provides all variables in the data set
 - Modified/limited analysis data set
 - Provides limited variables and/or limited data

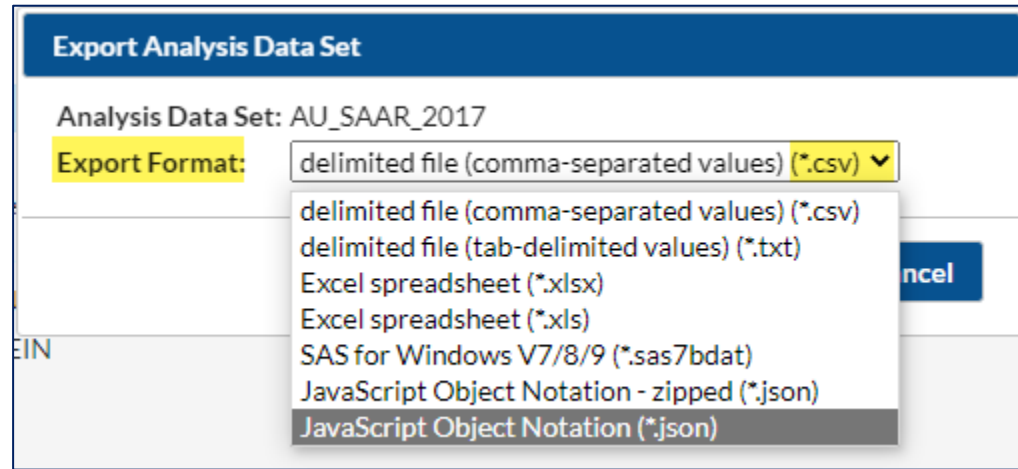
Exporting the Entire Data Set

- To export the entire data set, click on the Analysis report you'd like to export data from and click on "Export Data Set"



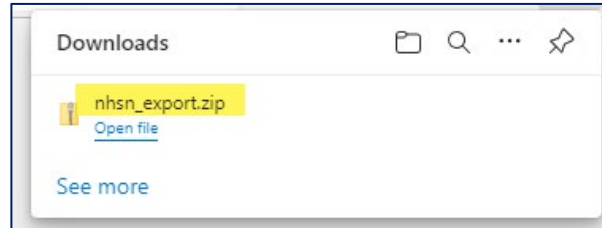
Exporting Data Sets: Format

- Select the export format




Exporting Data Sets: Zip File

- When downloaded, the file will appear as a ZIP file



- ZIP will contain the exported data set in the format chosen

<input type="checkbox"/>	Name	Type
	AU_SAAR_2017.csv	Microsoft Excel Comma Separated Values File

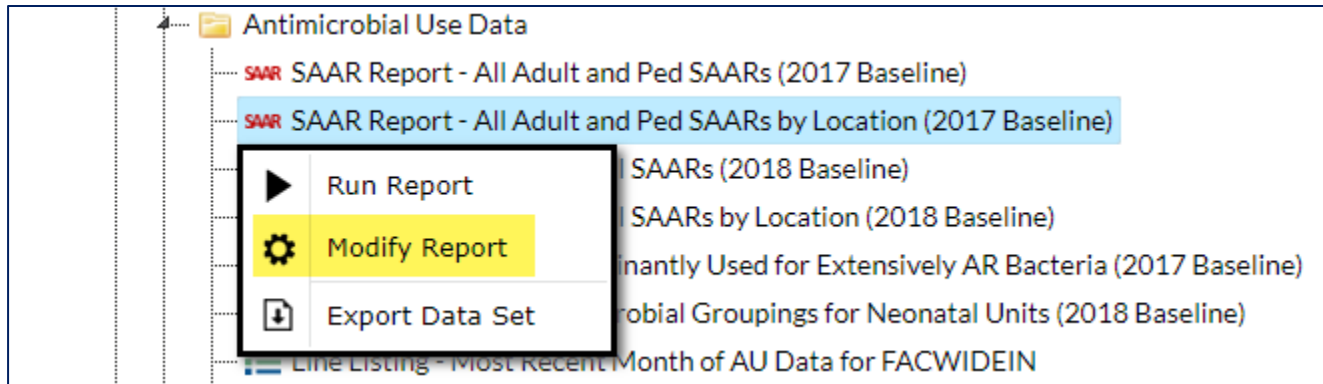
Exporting Data Sets: Output

- All variables in the analysis data set will be listed as columns in the output.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	orgID	summaryYM	SAARType_2017	location	orgloc	numDaysPresent	locCDC	summaryYR	summaryYH	summaryYQ	CCN	OID	facType
2	13860	2020M01	Adult_All-Antibacterial_2017	AD_STP_DN	13860-AD_STP_DN	1957	IN:ACUTE:STEP	2020	2020H1	2020Q1	999999	2.111.111.111.10009	HOSP-GEN

Exporting with Modifications

- If you'd like to export specific data such as only one quarter, one drug or one location, export the modified/limited data set.
- Select the report and choose "Modify Report."



Exporting with Modifications: Example

- Make the desired modification(s) to export
- Modified to export only one year of data selecting “Summary~Yr” beginning and ending with 2021
- Click Export

Modify "SAAR Report - All Adult and Ped SAARs by Location (2017 Baseline)"

Show descriptive variable names ([Print List](#)) Analysis Data Set: AU_SAAR_2017 Type: SAAR Last Generated: [February 11, 2022 8:59 AM](#)

Title/Format **Time Period** Filters Display Options

Time Period:

Date Variable	Beginning	Ending	
Summary~Yr	2021	2021	<input type="button" value="Clear Time Period"/>

Enter Date variable/Time period at the time you click the Run button

Exporting with Modifications: Example (continued)

- Select the desired export format
- Select “Export Analysis Data Set using Modifications”
- A ZIP file will appear containing the exported data set.

Export Analysis Data Set

Analysis Data Set: AU_SAAR_2017

Export Format: delimited file (comma-separated values) (*.csv) ▼

Export Entire Analysis Data Set

Export Analysis Data Set using Modifications

Export **Cancel**

Exporting with Modifications: Output

- The modified/limited data will appear with each variable as a column

	A	B	C	D	E	F	G	H	I	J	K	L
				Summary Year/Month		Antimicrobial Days	Predicted Antimicrobial Days				95% Confidence~ Interval	SAAR Percentile
1	Facility Org ID	SAAR Type 2017 Baseline	Location		CDC Location			Days Present	SAAR	SAAR p- value		
2	13860	Adult_All-Antibacterial_2017	AD_STP_DN	2021M01	IN:ACUTE:STEP	694	1095.314	1827	0.634	0	0.588, 0.682	17
3	13860	Adult_All-Antibacterial_2017	AD_STP_DN	2021M02	IN:ACUTE:STEP	690	1122.292	1872	0.615	0	0.570, 0.662	15

AU Analysis Resources

NHSN AUR Module Resources

- NHSN AUR Module webpage:
<https://www.cdc.gov/nhsn/psc/aur/index.html>
- One-stop shop for:
 - Protocol
 - Validation material
 - Link to training resources
 - Link to Analysis Quick Reference Guides
 - Link to FAQs
 - Link to CDA Toolkits

Antimicrobial Use and Resistance (AUR) Options

Protocols

[Chapter 14: Antimicrobial Use and Resistance \(AUR\) Module – January 2022](#) [PDF – 1 MB]

[2022 Summary of Updates](#) [PDF – 200 KB]

Supporting Chapters

[Chapter 1: NHSN Overview – January 2022](#) [PDF – 350 KB]

[Chapter 3: Patient Safety Monthly Reporting Plan – January 2022](#) [PDF – 300 KB]

[Chapter 15: CDC Location Labels and Location Descriptions – January 2022](#) [PDF – 1 MB]

[Top of Page](#)

Data Collection Forms & Instructions

[Annual Facility Survey Forms](#)

[Top of Page](#)

AUR Training

Educational Roadmap

AU Case Examples

AU Synthetic Data Set

CDA Toolkits

Quick Reference Guides
How to run, modify and interpret all AUR Module reports.


FAQs

[Antimicrobial Use \(AU\) Option](#)

AUR Training Materials

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AUR Training

Educational Roadmap

AU Case Examples

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Quick Reference Guides

How to run, modify and interpret all AUR Module reports.

[Top of Page](#)

AUR Training Page

- This page provides several videos & presentation slide decks for training purposes
- <https://www.cdc.gov/nhsn/training/patient-safety-component/aur.html>

AUR Training

Training Videos



NHSN Antimicrobial Resistance (AR) Option: Facility-Wide Antibigram Report – March 2021

- [YouTube Link \[Video – 23 min\]](#)
- [Slideset](#) [PDF – 2 MB]



Antibiotic Stewardship – May 2019

- [YouTube Link \[Video – 27 min\]](#)
- [Slideset](#) [PDF – 2 MB]



Antimicrobial Use (AU) Option: Reporting and Analysis – May 2020

- [YouTube Link \[Video – 50 min\]](#)
- [Time stamps by section](#) [PDF – 250 KB]
- [Slideset](#) [PDF – 4 MB]



Antimicrobial Resistance (AR) Option: Reporting and Analysis – May 2019

- [Review updated AR slides for 2020](#) [PDF – 1 MB]

On This Page

[Training Videos](#)

[Quick Learns](#)

See Also

[AUR Module](#)

[PSC Overview Training](#)

[Analysis Training](#)




AUR Roadmap

A step-by-step guide to AUR surveillance for new users.

Quick Reference Guides

Antimicrobial Use and Resistance (AUR) Options


Protocols

[Chapter 14: Antimicrobial Use and Resistance \(AUR\) Module – January 2022](#)  [PDF – 1 MB]

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AUR Training

Educational Roadmap


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AU Synthetic Data Set

CDA Toolkits

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How to run, modify and interpret all AUR Module reports.

 [Top of Page](#)

Quick Reference Guides (QRGs): AU Reports

- There are several QRGs to review on how use Line Lists, Rate Tables, Bar Charts, Pie Charts and SAARs.
- <https://www.cdc.gov/nhsn/ps-analysis-resources/reference-guides.html#accordion-1-collapse-5>

Antimicrobial Use Option

- **New!** [2020 Antimicrobial Use Option Data Report](#)  [PDF – 650 KB]
- [NHSN's Guide to the SAAR](#)  [PDF – 2 MB]
- [Antimicrobial Use Line List](#)  [PDF – 300 KB]
- [Antimicrobial Use Rate Table – By Location](#)  [PDF – 225 KB]
- [Antimicrobial Use Rate Table – FacWideIN](#)  [PDF – 300 KB]
- [Antimicrobial Use SAAR Baseline Rate Tables](#)  [PDF – 800 KB]
- [Antimicrobial Use Bar Chart](#)  [PDF – 300 KB]
- [Antimicrobial Use Bar Chart – Selected Drugs](#)  [PDF – 400 KB]
- [Antimicrobial Use Pie Chart](#)  [PDF – 300 KB]
- [Keys to Success with the SAAR](#)
- [Antimicrobial Use SAAR Table](#)  [PDF – 1 MB]
- [Antimicrobial Use SAAR Table – By Location](#)  [PDF – 750 KB]
- [Antimicrobial Use – SAAR Bar Chart by Location](#)  [PDF – 1 MB]

Frequently Asked Questions (FAQs)

Data Collection Forms & Instructions

[Annual Facility Survey Forms](#)

Data Validation

AU Option Validation

[AU Option Implementation Data Validation – February 2021](#)  [PDF – 1 MB]
(print version)

- [Customizable Form](#)  [DOC – 250 KB] (print version)

FAQs

- [Antimicrobial Use \(AU\) Option](#)
- [Antimicrobial Resistance \(AR\) Option](#)
- [Locations](#)
- [CDA](#)
- [View All FAQs](#)

NHSN AU FAQ page

- The AU FAQ page allows for users to click on the topic they have questions about and review answers and examples
- <https://www.cdc.gov/nhsn/faqs/faq-au.html>

FAQs: Antimicrobial Use (AU) Option

On This Page

[General Submission](#)

[Promoting Interoperability \(formerly Meaningful Use\)](#)

[Monthly Reporting Plan](#)

[Locations](#)

[Antimicrobial Days](#)

[Days Present](#)

[Data Import](#)

[General AU Option Analysis](#)

[Standardized Antimicrobial Administration Ratio \(SAAR\)](#)

Thank you!

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov



The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

