

# Guide to the Monthly Infection and Antibiotic Medication (ABX) Tracking Form



## About the IPRO QIN-QIO

The **IPRO Quality Innovation Network–Quality Improvement Organization (QIN-QIO)** is a collaboration of three organizations with decades of experience serving as Medicare QIOs.

The collaboration is led by **IPRO**, and joined by two other established and respected Medicare QIOs: **Healthcentric Advisors** and **Qlarant**.

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## INTRODUCTION

The “MONTHLY INFECTION AND ABX TRACKING FORM” was developed to assist facilities with a way to track both their infections and antibiotic use on a monthly basis. It maintains an active list of all infections and antibiotics in “real time”.

This guide will show you how to make the best use out of the MONTHLY INFECTION AND ABX TRACKING FORM. This guide will also serve as a troubleshooting guide to assist you with common issues you may come upon.

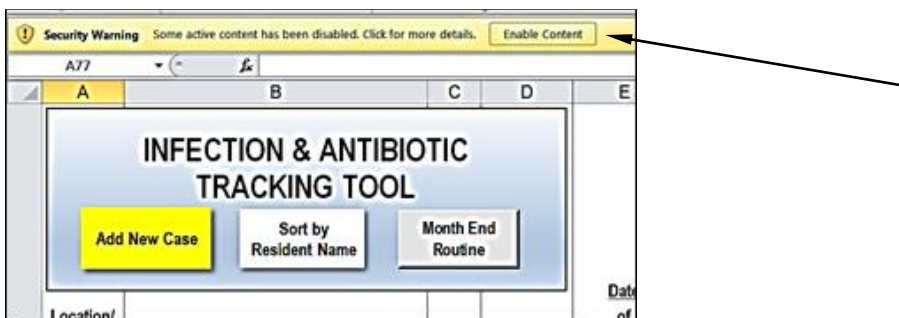
The computer file is in an Excel format. However, many of the components of the file are “protected” in an effort to both maintain the functionality of the program and prevent unintended changes by a new user.

The process is simple. You open the file... saving it to your computer in its present form as a “MASTER” file that you may always return to in the event of any sort of data loss or unintended deletion on a user’s part.

Follow the instructions (There is a “Setup Instructions” sheet tab for easy reference.) entering each antibiotic and infection individually on the “Data Entry Sheet”. Remember to pay attention to detail.

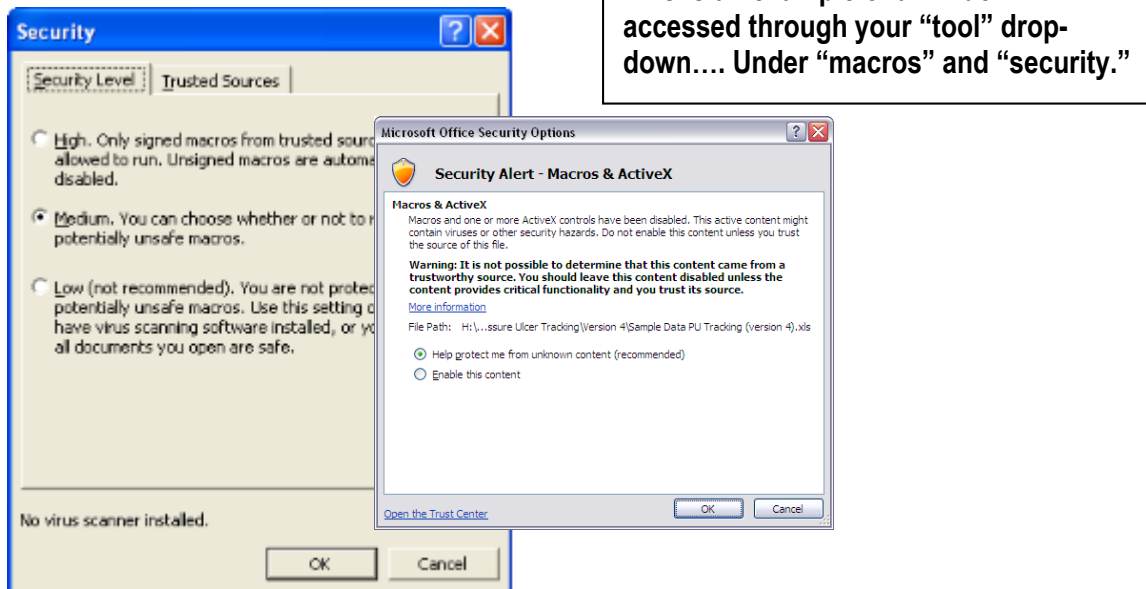
## OPENING THE FILE

When you first open the file, you may get a pop-up message like the one displayed below. **You must “enable the content”** in the file to take advantage of the “automated” functions such as “Add New Case”, “Sort by Resident Name” and the “Month End Routine”.

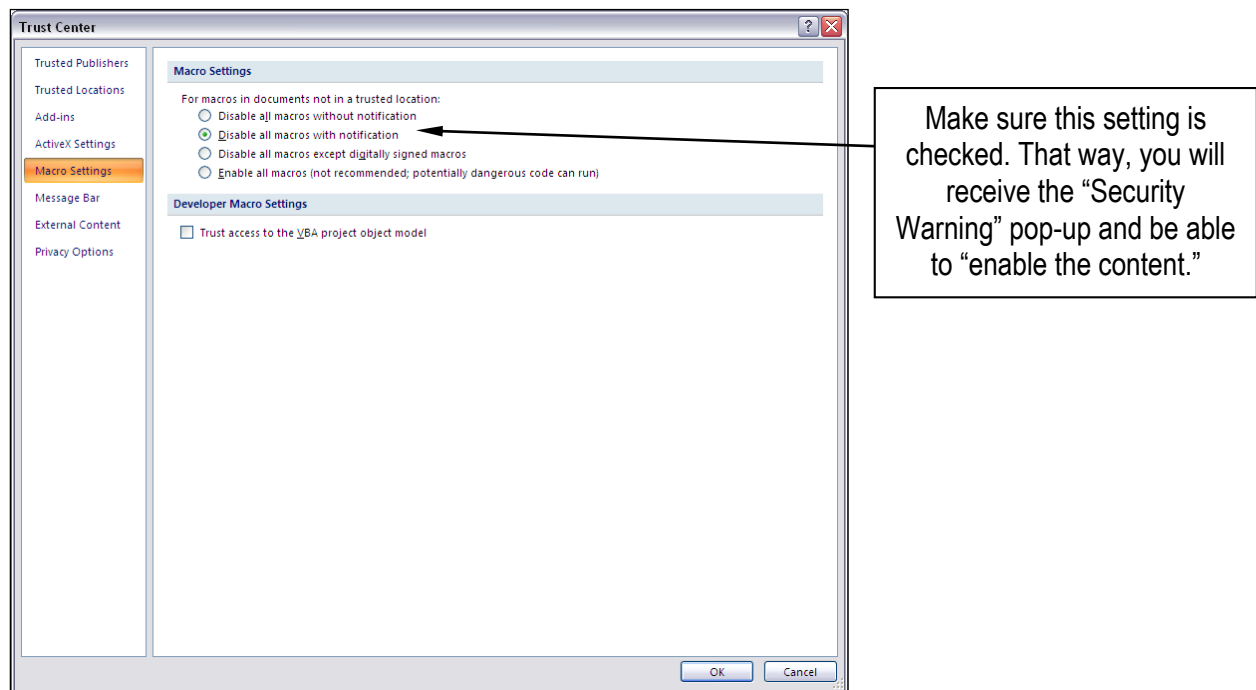


## SECURITY SETTING IN EXCEL

Your SECURITY SETTING in Excel cannot be set higher than “MEDIUM” to have the “automated functions” (macros) operate properly.



Depending on your version of Excel, the macro security setting may also be under the “Developer” tab... “macro security.”



If you find that your security setting has to be changed, you will need to **re-open** the Tracking Form file (after you change your security settings) to see the required “pop-up” message to “enable macros”.

## “SETUP INSTRUCTIONS” TAB

This tab/sheet contains the initial and ongoing setup instructions for the tracking form.

Included in the instructions are such items as “Location Designation”, “Prescriber Listing”, the resident days process, etc. Each of those components is addressed separately in this desk-side reference booklet.

## LOCATION DESIGNATION

This version of the Monthly Infection and ABX Tracking Form automatically drills down your data by specific locations you have designated within the file.

Location/Unit	Resident Name	ST/LT	Room/Bed	Date of Admission	Infection Resolved or Resident Discharge (enter X)	Date of Infection	Date of Resolution	Age of Infection in Days	Days to Resolve	Facility Acquired?	Infection	Fever @ Onset	Symptom	Other Infection (brief fr)
<b>TOTALS --&gt;</b>														

There is a “Location Designation” tab within the file that allows you to name each designated location to label each summary and associated graphs with a “name” you are familiar with in your facility (“Unit 1”... or “First Floor”... or “A Wing” , etc.)

## LOCATION DESIGNATION TAB INSTRUCTIONS

Location / Unit	"Facility Designation"	Resident Days	Average Daily Census	Enter Total Resident Days Reported for Month-->	
				Average Daily Census-->	0
Location 1 -		0	0	<i>For the green cells on the left, enter your "Resident Days" for each designated location.</i>  <i>The "Total Resident Days" should match your Total Resident Days at the end of the month being tracked.</i>  <i>These statistics will be used to automatically calculate your individualized infection rate per "Summary" sheet.</i>	↑
Location 2 -		0	0		
Location 3 -		0	0		
Location 4 -		0	0		
Location 5 -		0	0		
Location 6 -		0	0		
Location 7 -		0	0		
Location 8 -		0	0		
Location 9 -		0	0		
Location 10 -		0	0		
<b>TOTAL RESIDENT DAYS FOR MONTH BEING TRACKED</b>		0	0	←	
<small>(This should equal the "Total Resident Days Reported" as entered above.)</small>					

Next to each designated location on the above left, designate (or name) your facility-specific description of the separate area you would like to have summarized and

Clear All Resident Days

These two figures should balance. Otherwise the entered "location" days are incorrect.

When you open the "Location Designation" tab, you will see the screen above. You will need to enter the "name" you wish to associate data in the "Facility Designation" column.

Any text entered in the yellow cells will be displayed in the corresponding summary sheets and graphs summarizing the data for that specific location.

The Infection and ABX Tracking file allows for up to 16 separate location designations for your facility.... be they units, neighborhood, floors, etc.

These locations correspond to the "1" through "16" designation in the first column of the Data Entry Sheet.

This tab is also where you will enter your "Resident Days" at the end of the month. The TOTAL Resident Days for the entire facility should be entered in the far upper right-hand corner cell.

You may also choose to enter the Resident Days for each designated location if you wish to see the calculated statistics for each individual location. As you enter the location-specific resident days, the form will calculate a running total and compare it to the "Entire Facility" statistic you already entered in the far upper right-hand corner cell. If the totals do not balance, the cell totals will turn RED. They will not display as GREEN until the running total resident days reported by location and the Total Resident Days Reported for the Month (upper right hand corner) "balance".

At the start of a new month, you should click the "button" to Clear All Resident Days. The resident days for the current month should be entered after the month is complete.

If you choose not to enter resident days by location, you simply will not see calculated rates that are based on resident days and the individual location summary sheets will indicate "'0 Resident Days".

You can easily refer to this "tab" at any time to refresh your memory as to the correct "# location for a specific resident in your data collection.

## **PRESCRIBER LISTING TAB INSTRUCTIONS**

On this tab/sheet, you have the ability to list up to 25 separate “prescribers”.

It is recommended that you only enter LAST NAME, or LAST NAME, FIRST INITIAL if you need to differentiate between 2 prescribers with the same last name.

These may be entered in any order, BUT it is recommended that once you are complete with your listing, you click the “Sort Prescriber by Last Name” button to put your listing in alphabetical order.

It is important to note that the order of this Prescriber Listing will appear as the cell drop-down in the Prescriber column on the Data Entry Sheet.

You **MUST** choose the Prescriber from the drop-down listing offered on the Data Entry Sheet tab to properly capture and track the information by Prescriber.

You may add and/or delete prescribers from this tab at any time for up to a total of 25. Make sure to click the “Sort Prescriber by Last Name” button to re-order your drop-down listing.

## **AUTOMATIC CALCULATIONS AND GRAPHING**

As data is entered into the “Data Entry Sheet”, all location summaries are automatically calculated to include several bar graphs with the real-time information. Make sure you scroll down on each tab to see all of the available summaries and graphs.

All of the location summaries and the various bar graphs will provide instant visual tools for monitoring, communication and staff education.

## **COMBINATION ANTIBIOTIC THERAPY**

In the event of multiple antibiotics being prescribed for the same resident / same infection, **a new line should be entered to capture each antibiotic for tracking**.

However, on the second antibiotic entry, **DO NOT** choose the infection for the second antibiotic.

This will prevent the infection from being counted twice.

**Make an entry in the “Additional Comments” column for your prompting (i.e. combination antibiotic therapy) to capture the information.**

**“DATA SUMMARY SHEETS”**

MONTHLY STATISTICS										Atlantic Quality Innovation Network NY - DC - SC		Resident Days Reported for Month (Facility-wide)	
New ABX Starts for Month												4550	
New ABX Start Rate (New ABX Starts for Month/1000 Resident Days)												0.66	
Days of Therapy Rate (Monthly Days of Therapy/1000 Resident Days)												40.66	
# Did NOT Meet Facility Criteria												0	
# NOT Re-Assessed within 48-72 hours of antibiotic start												0	
Monthly Infection Rate												0.66	
												Location of Data	
												Facility-wide	

ANTIBIOTICS	TOTAL TRACKED		NEW FOR MONTH				Average Days of Therapy		DAYS OF THERAPY FOR MONTH			DOT RATE	NEW ABX Start		
	#	% of Total	#	% of Total	Short Stay	Long Stay	Hospital Start	w/ End Date	No End Date	Tx	Prophylaxis	GRAND TOTAL	per 1000	per 1000	
AMIKACIN - INHALED	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
AMOXICILLIN	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
AMOXICILLIN/CLAVULANATE	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
AMPICILLIN	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
AMPICILLIN/SUBLECTAM	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
AZITHROMYCIN	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
CEFAZOLIN	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
CEFDINIR	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
CEFEPIME	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
CEFPODOXIME	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
CEFTAZIDIME	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
CEFTRIAZONE	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
CEFUROXIME	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
CEPHALEXIN	4	30.8%	0	0.0%	0	0	0	9	0	18	0	0.00%	18	3.96	0.00
CIPROFLOXACIN	1	7.7%	1	33.3%	0	1	0	1	0	1	0	0.00%	1	0.22	0.22
CLARITHROMYCIN	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
CLINDAMYCIN	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
COLISTIN	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
DAPTOMYCIN	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
DOXYCYCLINE	1	7.7%	1	33.3%	0	1	0	11	0	11	0	0.00%	11	2.42	0.22
ERTAPENEM	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00
ERYTHROMYCIN	1	7.7%	0	0.0%	0	0	0	0	280	0	31	100.00%	31	6.81	0.00
FIDAXOMICIN	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0.00%	0	0.00	0.00

◀ ▶ | SETUP INSTRUCTIONS | Data Entry Sheet | Prescriber Listing | Location Designation | ALL Prescriber ABX Practice | Prescriber A

This is an example of a sheet (or “tab”) within the workbook that is protected (or “locked”) and is automatically filled in as information is entered into the “Data Entry Sheet”. All calculations are automatic and that information is automatically carried over into the various bar graphs also included within this same “tab”.

This example above illustrates the “Facility-wide Summary” where ALL infections and antibiotics being tracked are summarized and graphed in total.

You will note that there are other “tabs” identified as “Location 1 Summary”, “Location 2 Summary”, etc. Each of these tabs summarizes and graphs the infection and antibiotic tracking for a designated location. (see “Location Designation” section of this guide)

**Each location-specific summary and set of graphs is clearly identified with your description as entered on the “Location Designation” tab.**

**\*\* Because none of the “Summary” tabs contain PHI, ANY of the “Summary” tabs (Facility-Wide, Location 1 Summary, etc.) may be printed as a separate PDF to distribute or use as an e-mail attachment. \*\***



## ***“AUTOMATED” FUNCTION BUTTONS***



You will note that there are 3 “automated” choice buttons at the top of the sheet displayed... “Add New Case”, “Sort by Resident Name” and “Month End Routine”. All of these are explained in separate sections to follow.

### ***Add New Case (“AUTOMATED” FUNCTION BUTTON)***

By clicking on this “button”, you will automatically be taken to a blank row at the bottom of the Data Entry Sheet.

You should start entering appropriate data in the columns as directed by “pop-up” instructions and (if available)... dropdown lists to choose from.

Once you complete your entries for the line, you may click “Add New Case” again and a new blank line will be added to the form.

**MANY OF THE CELLS ALSO CONTAIN “DATA VALIDATION” WHICH IS SET UP TO ONLY ALLOW SPECIFIC ENTRIES IN THOSE CELLS. IN THOSE CASES, YOU WILL RECEIVE AN “ERROR” MESSAGE.**

### ***Sort by Resident Name (“AUTOMATED” FUNCTION BUTTON)***

By clicking on this “button”, the data on the Data Entry Sheet will be sorted by Resident Last Name.

This step would be helpful to “re-order” the resident listing to group all entries.

## **Month End Routine (“AUTOMATED” FUNCTION BUTTON)**

This is the process at the end of a completed month to remove both “resolved infections” and “antibiotics that have an end date entered”... leaving only the existing infections and antibiotics to be carried over as the starting data for the new month.

There are 2 specific areas that the “macro” is looking at to determine whether or not to remove a case...

1. **If there is an “X” entered in the column for “Infection Resolved or Resident Discharged” (Column F), the case will be removed for the new month.**
2. **If there is ANY date entered in the “ABX End Date” (Column Y), the case will be removed. DO NOT enter a date in the ABX End Date cell until the ABX actually ends.**  
(Suggestion: If you know when the ABX order is supposed to end, make a record of it in the “Additional Comments” column so you don’t have to search for it later. Remember... Excel is looking for ANY date in the ABX End Date column to remove a case. So, if you enter a future date (flowing into the next month), that case will be removed in the EOM routine.)

By choosing this “MONTH END ROUTINE” option, you will get a series of prompts to prepare the close of a month and the “carryover” of cases to a new month without having to enter all of the baseline information.

The “pop-up” prompts will explain the Month End Routine steps that will be completed, to include...

**Saving the current file in its present form, with its current “name”**

**It will then ask you to name the “new” file for the next month...**

Enter the name of the new file...

**REMEMBER to “Save As” and rename the file for the new month.**

This spreadsheet now is prepared as the start of your “new” month.

The file name will appear in the upper left-hand corner of every sheet in the file.

That includes all graphs.

Consider naming the file such as Infection and ABX Tracking - Month Year

(i.e. Infection and ABX Tracking - August 2018).

**PLEASE NOTE – MAKE SURE THAT YOU CHANGE THE DATE RANGE AT THE BOTTOM OF THE DATA ENTRY FORM TO REFLECT THE “NEW” MONTH... AND RE-SAVE THE FILE.**

## ***PRINTING FROM YOUR MONTHLY INFECTION AND ABX TRACKING FORM FILE***

The “Data Entry Sheet” may easily be printed out for simple updates on weekly status, resolution dates, discharges, new infections or antibiotics prescribed and updated comments.

Any of the “Summary” tabs may be printed at any time. All summaries and graphs will contain all of the data entered up to that point on the “Data Entry Sheet”.

Each “Summary” tab will contain data summary sheets, specific to that tab (location), along with location-specific graphs.

## ***ABILITY FOR DETAILED COMMENTS***

There are 2 “free text” fields for each “case” entered that you may use for any purpose you see fit.

The first is “Other Infections/Symptoms”. This may be used to expand on details not captured in other columns.

The second “free text” field is under “Additional Comments”. Use this field for any information that may be helpful to anyone reviewing this tracking form. Examples of use include treatment trials, consultation notes, etc.

## ***“UNPROTECTING” THE DATA ENTRY SHEET***

As a default setting, the Data Entry Sheet is protected. The protection on this Data Entry Sheet is not password-protected to allow for the functionality of the macros (“add new case”, “sorting”, etc.).

**It is STRONGLY RECOMMENDED that you DO NOT unprotect the Data Entry Sheet at any time.**

Changes in any of the column headings, formatting, etc. will cause the file to lose some or all of its functionality.

**All of the other “tabs” or “sheets” within this Infection and ABX Tracking Form file are password-protected in an attempt to secure the functionality of the tracking tool.**

## **ALL PRESCRIBER ABX PRACTICE TAB**

This tab/sheet summarizes all data on antibiotics, prophylactic antibiotics, and new antibiotics for the month... by prescriber... for all prescribers combined.

There are graphs to show a simple count of antibiotics and new antibiotics for the month by prescriber.

## **PRESCRIBER ABX DETAIL TAB**

This tab is set up for you to choose a prescriber from the dropdown listing (piloted by your own prescriber listing). Once you choose the prescriber from the dropdown at the top of the sheet, the prescriber-specific information will instantly populate the summary tables and the associated graphs.

Included in the summary tables are such details as total antibiotics tracked for the month, any new antibiotics prescribed for the month, days of therapy or prophylaxis by antibiotic, prophylactic use by antibiotic and “reason”, whether infections met facility-adopted criteria, and if re-assessment was completed within 48-72 hours of a facility-start antibiotic.

This tab may easily be printed and shared with the prescriber to prompt discussion and review.

**PLEASE NOTE – Since the “Prescriber ABX Detail” tab does not contain any PHI, it may be printed as a PDF file and easily shared electronically with the individual prescriber.**

## **RESOURCE TABS**

This tracking tool also contains “resource tabs” for established criteria.

There is a separate tab for the most current McGeer and Loeb criteria. When you are on the “tabs” across the bottom of your screen, “>” over on the far left hand lower corner... to the end of the tabs to view the separate resource tabs that are available.

## **CUSTOM STATISTICAL TRENDING REPORT**

There is a separate “customizable” trending file available to trend up to 12 separate focus areas or data points across 12 time periods.

This is a separate Excel file that is available upon request.

**FOR ADDITIONAL INFORMATION**

**PLEASE CONTACT.....**

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