

Companion Animal Antibiotic Use Tracking Tool Instructions – Expanded

USE THIS TRACKING TOOL TO UNDERSTAND YOUR CLINIC'S ANTIBIOTIC USE, PRESCRIBING PATTERNS, AND IMPLEMENT ANTIBIOTIC STEWARDSHIP INITIATIVES BASED OFF RESULTS

Total Patients

The 'Total Patients' worksheet must be manually entered into the chart before any auto-calculations and/or charts can be generated by Excel.

The time period is set up by month by default, but can be adjusted to fit your clinics' goals for recording data. For example, you can record data for the first week of every month, but the total number of patients entered into the 'Total Patients Worksheet' chart must also be only from the first week of the month to reflect the correct statistics.

The time period for tracking should be clearly defined for your clinic prior to using the tool. Please define in advance which type of patient visits will be included to be sure all the data is accurate (e.g. technician only appointments can be excluded).

Summary Tables

The 'Summary Tables' worksheet will provide you with summarized data after entering patient data into the monthly tracking sheets. This sheet contains tables and charts. All data on this sheet automatically populates as data is entered on each monthly tracking sheet. **Do not manually delete or add data to these tables and/or charts as there are formulas associated with each table and chart.**

We recommend having at least 200 rows of patient data entered before using the results to make decisions that might change how your clinic prescribes antibiotics or implements antibiotic stewardship interventions.

Monthly Tracking

Each patient should be a new row in the monthly tracking worksheets. For each patient visit being tracked, fill in the corresponding columns with data. Each patient can have up to 3 diseases or conditions associated with the visit. If there is only 1 disease/condition, leave the rest of the columns blank. Each disease can have up to 3 antibiotic prescriptions associated with that disease/condition. Please fill in the appropriate antibiotic information for each condition per patient.

Sharing Data to Improve Companion Animal Medicine

If your clinic uses this tracking tool, please consider sharing data with the University of Minnesota research team that developed this tool. There is limited information known about antibiotic use in companion animal medicine. If multiple clinics share data, our team can aggregate (combine) de-identified data to get a better understanding of antibiotic use in companion animal medicine, the diseases for which antibiotics are prescribed, and how we can help improve antibiotic prescribing in the profession. Please remove the Attending Clinician's name from each row (column B) before sending. Email your spreadsheet or your questions to cavsnet@umn.edu.

Printing of Data and Charts

Printing lengthy spreadsheets, such as this, can be difficult as they are often too long to fit on a single page. For this reason, we recommend using the Print Screen key or the Snipping Tool to capture screenshots of reports and data you are interested in presenting.

[Microsoft Support: Copy the window or screen contents](#)

[Microsoft Support: Use Snipping Tool to capture screenshots](#)

Once you have an image of your screen, you are now able to save and print the image as is, copy and paste the image into other programs such as Word or PowerPoint, or include the image in a report with other data or images.

Resources

- Find additional antibiotic stewardship resources at the [University of Minnesota Antimicrobial Resistance and Stewards Initiative](https://arsi.umn.edu) website (<https://arsi.umn.edu>).

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Data Fields and Instructions for Entering Patient Data into Tracking Tool

DATA FIELD	COLUMN(S)	INSTRUCTIONS
Patient Visit Information		
Date of Service	A	Enter date of service as MM/DD/YYYY. This date represents when the patient was seen in the clinic. All data collection should be relative to this date.
Attending Clinician	B	Enter LAST NAME of the attending clinician for the patient during this particular visit. For the purpose of this tool, the attending clinician will be considered the prescriber of antibiotic prescriptions for the patient/case entered. This is a free-text field.
Patient Medical Record Number	C	Enter patient's MEDICAL RECORD NUMBER. Do not include dashes or spaces. Use upper case letters if there are any letters in the medical record number. This is a free-text field.
Patient Species	D	Select patient's SPECIES from the drop-down list. List includes: Canine Feline
Patient Sex	E	Select patient's SEX from the drop-down list. If patient comes in for spay/neuter, select intact. List includes: Female Intact Female Spayed Male Intact Male Neutered
Patient Age	F	Select patient's AGE at date of appointment from the drop-down list. List includes: 0-4 months >4-12 months >1-3 years >3-7 years >7-10 year >10 years
Reason for Visit	G	Select patient's REASON FOR VISIT from the drop-down list. If "Other" is selected, explain the reason for visit in the next column called "If Other Reason for Visit Explain." List includes: Preventive Care Re-check Sick Surgery/Procedure Euthanasia Other If patient was initially scheduled for 'Preventive Care,' but an illness or condition became apparent during the visit, select 'Sick' for the 'Reason for Visit.'
If Other Reason for Visit Explain	H	If "Other" is selected in the tab "Reason for Visit," enter patient's REASON FOR VISIT. This is a free-text field. If more than one reason for visit exists, separate by commas. Spell out all words.

ANTIBIOTIC USE TRACKING TOOL INSTRUCTIONS - EXPANDED

DATA FIELD	COLUMN(S)	INSTRUCTIONS
Patient Prescribed Antibiotic	I	<p>This question should be answered for every patient included in the tracking tool. Select “Yes” if the patient was prescribed or given at least one dose of an antibiotic on the date of service. Acceptable antibiotics are those that appear in Appendix 1.</p> <p>Select “Watchful Waiting” for use of delayed prescribing for conditions that often self-resolve.</p>
Total Number of Antibiotics Prescribed	J	<p>Enter the TOTAL NUMBER OF ANTIBIOTICS PRESCRIBED at this visit. This should be a whole number and account for all antibiotics prescribed for all diseases/conditions for this patient on the date of service. If “Patient Prescribed Antibiotic” is “No” then “Total Number of Antibiotics Prescribed” should be “0” (zero). Enter number as a numerical digit (e.g., “0,” “1,” “2,” “3,” “4”). This is a free-text field.</p>
Disease (up to 3 per patient)		
Disease/Infection Type	K, AL, BM	<p>Select the DISEASE/INFECTION TYPE from the drop-down list. This is entered only if an antibiotic is prescribed.</p> <p>List includes:</p> <ul style="list-style-type: none"> Dental Disease Dermatologic Disease Gastrointestinal Disease Hepatic Disease Leptospirosis Neurological Disease Ocular Disease Otic Disease Peri-operative Reproductive Disease Upper Respiratory Tract Disease Lower Respiratory Tract Disease Upper Urinary Tract Disease Lower Urinary Tract Disease Vector-borne Disease Other None Unknown
If Other Disease/Infection Type Explain	L, AM, BN	<p>If “Other” is selected in the tab “Disease/Infection Type,” enter patient’s disease or infection type. This is a free-text field. Spell out all words.</p>
Disease Description	M, AN, BO	<p>Select DISEASE DESCRIPTION from the drop-down list.</p> <p>List includes:</p> <ul style="list-style-type: none"> Acute Chronic Recurrent Other None <p>For the purposes of this tool, use the following definitions:</p> <ul style="list-style-type: none"> • ‘Acute’ refers to any condition that has a duration of under 2 weeks. • ‘Chronic’ refers to any condition that has a duration of over 2 weeks. • ‘Recurrent’ refers to a condition that has been treated previously, considered fully resolved, and is occurring again. • ‘None’ refers to if this is not applicable for the patient of condition (e.g. peri-operative antibiotics)
Number of Antibiotics	N, AO, BP	<p>Select the NUMBER OF ANTIBIOTICS PRESCRIBED FOR THIS SPECIFIC CONDITION from the drop-down list (1-3).</p>

ANTIBIOTIC USE TRACKING TOOL INSTRUCTIONS - EXPANDED

DATA FIELD	COLUMN(S)	INSTRUCTIONS
Prescribed for this Condition		
Diagnostics Offered	O, AP, BQ	Select "Yes" or "No" if DIAGNOSTICS WERE OFFERED to the client to help confirm/diagnose this specific disease/infection. This reflects whether or not diagnostics were offered and does not reflect whether or not diagnostics were performed.
Diagnostics Performed	P, AQ, BR	Select "Yes" or "No" if DIAGNOSTICS WERE PERFORMED. This should describe IF diagnostics were performed to help confirm this specific disease/infection. If 'Diagnostics Offered' is no, this field should also be no.
Antibiotics (up to 3 per disease per patient)		
Drug Name	Q, X, AE, AR, AY, BF, BS, BZ, CG	Select the generic antibiotic DRUG NAME from the dropdown list. Names of acceptable antibiotics appear in the dropdown list and in Appendix 1.
Drug Class	R, Y, AF, AS, AZ, BG, BT, CA, CH	The antibiotic DRUG CLASS will automatically generate based off the "Drug Name" selection. Names of acceptable antibiotic drug classes appear in Appendix 2.
Dose (in milligrams)	S, Z, AG, AT, BA, BH, BU, CB, CI	Enter the DOSE (IN MILLIGRAMS) of the antibiotic prescribed. Enter this as a numerical digit. For example, if the patient was prescribed Amoxicillin-250 mg, oral, 5x/day for 10 days, enter "250." Do not include the word 'mg.'
Frequency	T, AA, AH, AU, BB, BI, BV, CC, CJ	Select the FREQUENCY the antibiotic was given from the dropdown list. List includes: SID (once a day) BID (twice a day) TID (three times a day) QID (four times a day) EOD (every other day) Once Other N/A
Route	U, AB, AI, AV, BC, BJ, BW, CD, CK	Select the ROUTE the antibiotic was administered from the dropdown list. List includes: IM (intramuscular) IV (intravenous) PO (oral) SQ (subcutaneous) Topical Other
Duration (in days)	V, AC, AJ, AW, BD, BK, BX, CE, CL	Enter the DURATION (IN DAYS) that the antibiotic was prescribed. For example, if the patient was prescribed Amoxicillin-250 mg, oral, 5x/day for 10 days, enter "10." Do not include the word 'days.'
Location Filled	W, AD, AK, AX, BE, BL, BY, CF, CM	Select the LOCATION where the antibiotic was filled from the dropdown list. List includes: In Clinic External Pharmacy

Appendix 1. Antibiotics

Amikacin
Amoxicillin
Amoxicillin/Clavulanic Acid (Clavamox, Augmentin)
Ampicillin
Ampicillin/Sulbactam (Unasyn)
Azithromycin
Bacitracin
Cefadroxil
Cefazolin
Cefepime
Cefotaxime
Cefovecin (Convenia)
Cefpodoxime Proxetil
Ceftazidime
Ceftiofur sodium
Ceftiofur crystalline free acid (long acting formulation)
Ceftriaxone
Cephalexin
Chloramphenicol
Chlortetracycline
Ciprofloxacin (oral)
Clarithromycin
Clindamycin
Colistin
Doxycycline
Enrofloxacin
Erythromycin
Florfenicol
Fosfomycin (Monurol)
Gentamicin
Imipenem/Cilastatin
Lincomycin
Linezolid (Zyvox)
Marbofloxacin (Zeniquin)
Meropenem

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Metronidazole
Minocycline
Mupirocin (Bactroban)
Neomycin
Nitrofurantoin
Ofloxacin
Ophthalmic Antibiotic
Otic Florfenicol (e.g. Claro, Osumnia)
Otic Gentamicin (e.g. Mometamax, Otomax)
Otic Enrofloxacin (e.g. Baytril Otic)
Otic Orbifloxacin (e.g. Posatex)
Otic Polymyxin B (e.g. Surolan)
Otic Neomycin (e.g. Animax)
Orbifloxacin (Orbax)
Oxytetracycline
Oxytetracycline/Polymyxin B
Penicillin G
Piperacillin/Tazobactam (Zosyn)
Polymyxin B
Pradofloxacin
Rifampin
Silver Sulfadiazine (SSD)
Sulfadiazine/Trimethoprim
Sulfamethoxazole/Trimethoprim
Sulfadimethoxine
Sulfadimethoxine/Ormetoprim
Sulfasalazine
Teicoplanin
Tetracycline
Tigecycline
Tobramycin Sulfate
Tulathromycin
Tylosin
Vancomycin
Other

Appendix 2. Antibiotic Drug Class

Aminoglycosides
B-lactam/B-lactamase inhibitor combination
Carbapenems
Carbapenems/dehydropeptidase inhibitors
Cephalosporins
Fluoroquinolones
Fosfomycins
Glycopeptides
Glycylcyclines
Lincosamides
Macrolides
Nitrofurans
Nitroimidazoles
Ophthalmic
Other
Otic
Oxazolidinones
Penicillins
Penicillins/beta-lactamase inhibitor
Phenicol
Polymyxins
Polypeptides
Rifampin
Sulfonamides
Sulfonamides/Folate pathway inhibitors
Tetracyclines
Tetracyclines/Polymyxins
Topical