

Survey prior to data collection for national point prevalence survey of antimicrobial use in veterinary teaching hospitals

Thank you for taking the time to complete this survey. It should take approximately 10 minutes to complete. This survey should be completed by an employee who has a working knowledge of your veterinary teaching hospital's practice and antimicrobial stewardship initiatives, and it will gather general information about your veterinary teaching hospital. All questions should be answered with respect to your veterinary teaching hospital (small and large animal) or small animal teaching hospital, as outlined by the question. Please have only one person from your hospital complete the survey.

Any questions should be directed to cavsnet@umn.edu.

Please keep the following definitions in mind when completing the survey:

- Antimicrobial resistance: the ability of microorganisms (including bacteria) to resist the effects of antimicrobials (including antibiotics).
- Antimicrobial stewardship: the process of improving how we use antimicrobials (including antibiotics) while effectively treating infections.
- Antimicrobial use: any time an antimicrobial (including antibiotic) is used in veterinary medicine, regardless of if the intent is to treat or prevent infection or not.
- Small animal: referring to dogs and cats.

Background Information

1. What is the veterinary teaching hospital's name for which you are completing this survey?
 - a. _____
2. In what state is [autofill hospital name]'s veterinary teaching hospital located?
 - a. __drop down of 50 states____
 - b. Other: _____
3. What is [autofill hospital name] small animal teaching hospital's 5-digit zip code?
 - a. _____
4. How would you classify [autofill hospital name] small animal teaching hospital's location? (*select only one*)
 - a. Metropolitan (metropolitan is defined as an area with a core population greater than 50,000)
 - b. Urban (urban is defined as an area with a core population of at least 2,500 people but less than 50,000)

- c. Rural or critical access (rural is defined as an area encompassing fewer than 2,500 people)
5. What is your position at [autofill hospital name]'s veterinary teaching hospital? (*select only one*)
- a. Veterinarian
 - b. Veterinary technician
 - c. Veterinary student
 - d. Graduate student
 - e. Other faculty/staff
 - f. Other: _____
6. What date did you select as the service date for the point prevalence survey? This date will be the day in which you generate a census of all hospitalized patients and appointments seen by core services (emergency and critical care, internal medicine, primary care, surgery, urgent care) at [autofill hospital name]'s small animal teaching hospital. This is not the date in which you enter data.
- a. Date field
7. Which of the following species does [autofill hospital name]'s veterinary teaching hospital treat? Please select all species treated at this hospital regardless if you treat or see them. (*select all that apply*)
- a. Canine
 - b. Feline
 - c. Equine
 - d. Pocket pets (e.g., hamsters, rabbits, ferrets)
 - e. Reptiles
 - f. Birds
 - g. Large animals (excluding equine)
 - h. Other: _____
8. Does [autofill hospital name]'s small animal teaching hospital offer any of the following specialties? (*select all that apply*)
- a. Cardiology
 - b. Clinical Microbiology
 - c. Clinical Pathology
 - d. Complementary/Alternative Medicine
 - e. Dentistry and Oral Surgery
 - f. Dermatology
 - g. Emergency and Critical Care
 - h. Intensive Care Unit
 - i. Internal Medicine
 - j. Medical Imaging
 - k. Neurology
 - l. Nutrition
 - m. Oncology
 - n. Ophthalmology
 - o. Pharmacy
 - p. Primary Care

- q. Radiation Therapy
 - r. Surgery
 - s. Theriogenology
 - t. Urgent Care
9. What is the total yearly canine and feline caseload for all services at [autofill hospital name]?
- a. _____
10. What is the total small animal (canine, feline) hospital caseload per year for each of the following core services at [autofill hospital name]?
- a. Emergency and critical care: _____
 - b. Internal medicine: _____
 - c. Primary care: _____
 - d. Surgery: _____
 - e. Urgent care: _____

Antimicrobial Resistance and Antimicrobial Use

11. Does [autofill hospital name]'s veterinary teaching hospital have an antimicrobial stewardship committee?
- a. Yes
 - i. What staff members are on the antimicrobial stewardship committee? *(select all that apply)*
 - 1. Veterinarian(s) – small animal
 - 2. Veterinarian(s) – large animal
 - 3. Veterinary Technician(s)
 - 4. Infection Preventionist(s)
 - 5. Laboratory Staff
 - 6. Practice Manager(s)/Hospital Director
 - 7. Pharmacist(s)
 - 8. Veterinary Public Health Faculty/Staff
 - 9. Other: _____
 - b. No
 - ii. Has there been any interest in establishing an antimicrobial stewardship committee at [autofill hospital name]'s veterinary teaching hospital?
 - 1. Yes
 - 2. No
 - 3. Unsure
 - iii. What are the major barriers to establishing an antimicrobial stewardship committee at [autofill hospital name]'s veterinary teaching hospital? *(select all that apply)*
 - 1. Lack of formal commitment or interest from hospital leadership
 - 2. Lack of formal commitment or interest from hospital staff
 - 3. Lack of staff time dedicated to antimicrobial stewardship activities
 - 4. Lack of dedicated resources to antimicrobial stewardship activities
 - 5. Other: _____

12. Does [autofill hospital name]'s veterinary teaching hospital have any training specific to antimicrobial stewardship? *(select all that apply)*
- Antimicrobial stewardship continuing education
 - In-house training for clinical faculty/staff
 - Specific antimicrobial stewardship course(s) in the veterinary student curriculum
 - Specific antimicrobial stewardship lecture(s) in the veterinary student curriculum
 - Antimicrobial stewardship concepts purposefully integrated into other course(s) in the veterinary student curriculum
 - Other: _____
 - None; [autofill hospital name]'s veterinary teaching hospital does not have any training specific to antimicrobial stewardship
13. Has leadership at [autofill hospital name]'s small animal teaching hospital done or do any of the following? *(select all that apply)*
- Communicated with practice members about antimicrobial stewardship efforts
 - Dedicated funds for antimicrobial stewardship programs
 - Dedicated funds for faculty/staff antimicrobial stewardship FTE/effort
 - Developed an antimicrobial stewardship plan or policy (a defined, common approach towards judicious antimicrobial use)
 - Identified high priority conditions to be targeted for improved prescribing
 - Identified one or more staff members to lead antimicrobial stewardship initiatives
 - Systemically assessed outcomes of prescribed antimicrobial drug therapy
 - None of these activities have been done by leadership at [autofill hospital name]'s small animal teaching hospital
 - Unsure if any of these activities have been done by leadership at [autofill hospital name]'s small animal teaching hospital
14. Are any of the following measures used routinely in [autofill hospital name]'s small animal teaching hospital to support responsible antimicrobial use and/or selection of antimicrobials? *(select all that apply)*
- Client fact sheets about antimicrobials and/or antimicrobial resistance
 - Client recommendations to relieve clinical signs when antimicrobials are not indicated (e.g., use of a "viral prescription pad")
 - Development of disease prevention protocols for the most common clinical conditions
 - Display (e.g., poster, pamphlet) of clinician or hospital-wide commitment to responsible antimicrobial use in waiting rooms and/or exam rooms
 - Evaluation of antimicrobial prescribing (e.g., tracking specific syndromes, tracking overall antibiotic use)
 - Policy requiring documentation of diagnosis or indication for antimicrobial prescriptions in medical record
 - Pre-authorization requirement for certain antibiotics
 - Protocols for use of diagnostic bacterial culture and susceptibility testing
 - Process to reassess the need for and choice of antibiotic 48–72 hours after first administration (i.e., antibiotic time-out)
 - Restricted formulary
 - Use of published treatment guidelines for common conditions (e.g., upper respiratory tract illness, urinary tract illness, pyoderma)
 - Use of watchful waiting methods for conditions that often resolve without antibiotics

- m. Other: _____
 - n. None of these measures to support responsible antimicrobial use are currently used in [autofill hospital name]'s small animal teaching hospital
 - o. Unsure if any of these measures to support responsible antimicrobial use are currently used in [autofill hospital name]'s small animal teaching hospital
15. In which of the following ways does [autofill hospital name]'s small animal teaching hospital evaluate prescribing practices? *(select all that apply)*
- a. Audit and feedback to summarize and inform clinicians about their prescribing behaviors
 - b. Measure and track prescribing of specific antibiotics (e.g., cefovecin, enrofloxacin)
 - c. Measure and track syndrome-specific prescribing (e.g., pets presenting for upper respiratory tract or urinary system complaints)
 - d. Other: _____
 - e. None; we currently do not evaluate prescribing practices in [autofill hospital name]'s small animal teaching hospital
 - i. Does [autofill hospital name] have any plans to start collecting and reporting antibiotic use data?
 - 1. Yes
 - 2. No
 - 3. Unsure
 - f. Unsure if any of the above are used to evaluate prescribing practices in [autofill hospital name]'s small animal teaching hospital
16. What kinds of support does [autofill hospital name]'s small animal teaching hospital NEED to better implement antimicrobial stewardship activities? *(select all that apply)*
- a. Client education materials on proper antimicrobial use
 - b. Clinical treatment consultation for difficult cases
 - c. Collaboration with other local hospitals to share and implement best practices
 - d. Continuing education opportunities for antimicrobial stewardship in small animal medicine
 - e. Dedicated funds for antimicrobial stewardship programs
 - f. Dedicated funds for faculty/staff antimicrobial stewardship FTE/effort
 - g. Electronic health records software/technology support
 - h. Federal/state regulations requiring hospital-based stewardship programs
 - i. Formal commitment from hospital leadership
 - j. Inclusion of hospital stewardship responsibilities in staff job descriptions
 - k. Listserv to provide education emails and event updates
 - l. Materials to guide engagement with hospital leadership
 - m. Prescribing guidelines specific to common small animal syndromes
 - n. Sample antimicrobial stewardship policy for small animal hospitals
 - o. State stewardship conference for clinicians specific to small animal medicine
 - p. Other: _____
 - q. None: we do not need any additional support to better implement antimicrobial stewardship activities in [autofill hospital name]'s small animal teaching hospital
17. Do you have any other information you would like to share about [autofill hospital name]'s veterinary teaching hospital's antimicrobial stewardship practices?
- a. Yes

- i. If yes, what other information would you like to share about [autofill hospital name]'s veterinary teaching hospital's antimicrobial stewardship practices?
 - 1. _____
- b. No

Thank you for taking the time to complete this survey and for your active involvement in the national point prevalence survey. Your dedication to research will help advance antimicrobial stewardship across the U.S.

Please visit <https://arsi.umn.edu> for free antimicrobial stewardship resources.