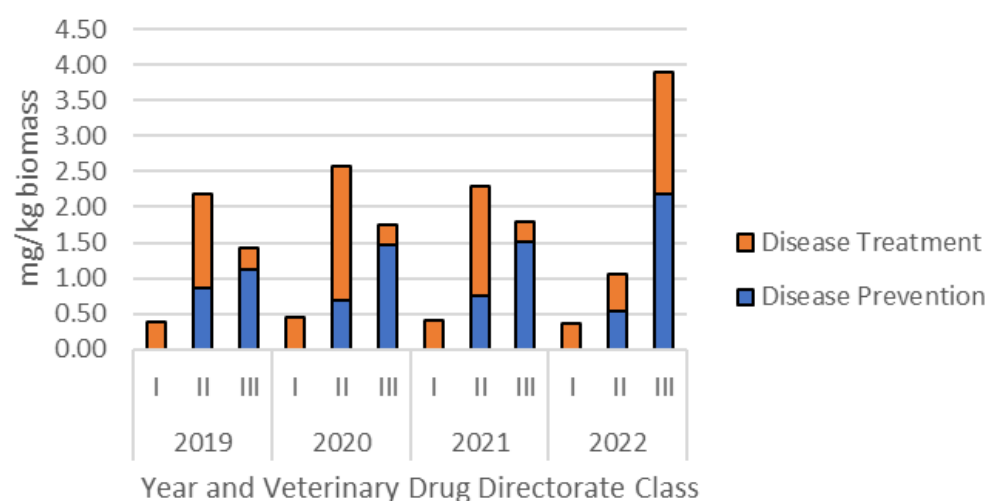


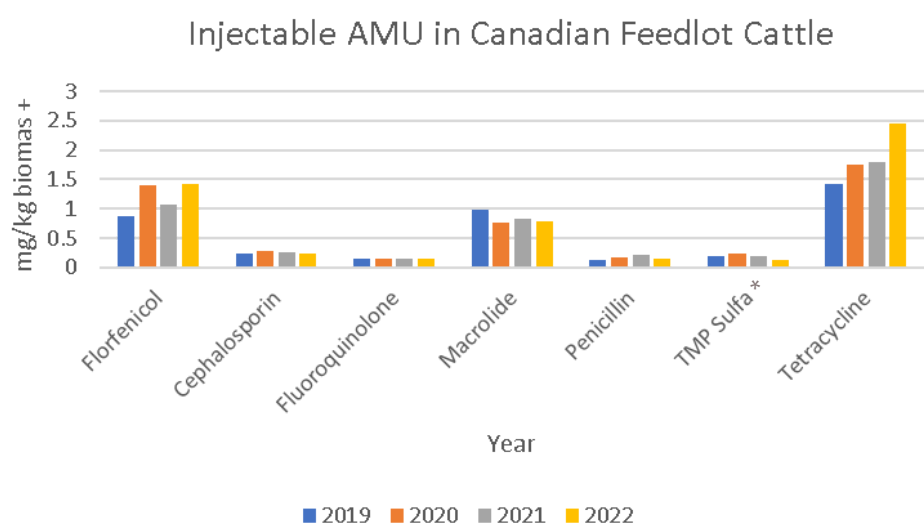
INJECTABLE ANTIMICROBIAL USE (AMU) IN CANADIAN FEEDLOT CATTLE 2019-2022



- AMU (antimicrobial use) data were collected annually from approximately 143,000 head of cattle in 523 randomly selected lots from 25 finishing feedlots in AB, SK and ON during 2019 to 2022.
- Calves represented 38% (254 DOF), yearlings 60% (181 DOF), and cows 1% (100 DOF) of the production lots.
- 51% of injectable antimicrobials were used for disease treatment and 49% for disease prevention.



ANTIMICROBIALS OF VERY HIGH IMPORTANCE IN HUMAN MEDICINE (CLASS I)* WERE ONLY USED IN FEEDLOT CATTLE FOR DISEASE TREATMENT, REPRESENTING 8% OF ALL INJECTABLE ANTIMICROBIAL USE.



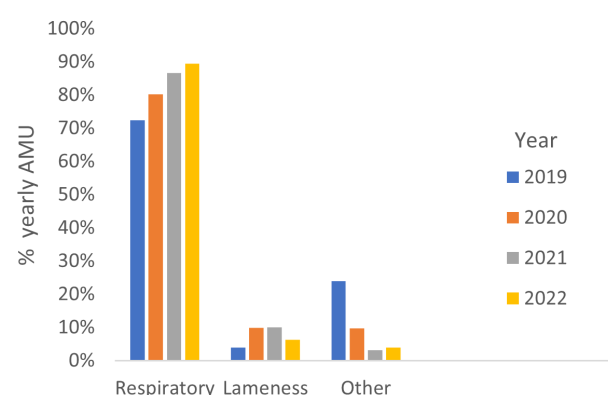
*TMP Sulfa = Trimethoprim Sulfadoxine

- Florfenicol e.g., Nuflor® and tetracyclines e.g., Bio-mycin® 200 were most used. They are antimicrobials of medium importance in human medicine*.
- Macrolides, such as tulathromycin (e.g., Draxxin®), tilimicosin e.g., Micotil™, tilipirosin e.g., (Zuprevo®), gamithromycin (Zactran®), and penicillin are classes of antimicrobials of high importance in human medicine*.
- Cephalosporins e.g., Excede® 200, Excenel®, and fluoroquinolones e.g., Baytril 100, A180®, Forcyl® are antimicrobials of very high importance in human medicine*.

TETRACYCLINE WAS THE MOST USED INJECTABLE ANTIMICROBIAL (40%), FOLLOWED BY FLORFENICOL (26%), MACROLIDES (18%), CEPHALOSPORINS (5%), PENICILLIN (4%), TMP-SULFA (4%), FLUOROQUINOLONES (3%).

- The largest use of parenteral (injectable) antimicrobials was for the treatment and prevention of bovine respiratory disease (BRD), which is a common infectious disease in feedlot cattle.
- On feedlot arrival, 35% of the feedlot cattle were deemed at high risk for BRD. Those at high risk for BRD may receive a metaphylactic antimicrobial on feedlot entry, to reduce morbidity, mortality, and economic losses.
- The second largest use of injectable antimicrobials was for the treatment of infectious lameness e.g., foot rot.
- More injectable antimicrobials were used in calves than yearling cattle, mainly due to their higher risk of BRD.
- More injectable antimicrobials were used in auction market sourced calves and yearlings than in ranch direct or backgrounded.
- **Work with your veterinarian to reduce infectious disease risks. Read our resources [here](#).**

Disease Reason for Injectable AMU in Canadian feedlots



RESEARCH IS ONGOING TO IDENTIFY NON-ANTIMICROBIAL METHODS TO PREVENT AND CONTROL BRD.

LEARN MORE ABOUT AMU/AMR IN CANADIAN FEEDLOT CATTLE ON OUR WEBSITE.



QUESTIONS?
EMAIL US!

INFO@CFAASP.CA

SCAN CODE OR CLICK
ON LINK TO VISIT US:

[CANADIAN FEEDLOT ANTIMICROBIAL USE AND ANTIMICROBIAL RESISTANCE SURVEILLANCE PROGRAM \(CFAASP\)](#)



+ mg active ingredient/kg animal mass = (mgs of all active ingredients administered by injection during the feeding period), divided by (the number of animals at risk multiplied by the annual average animal body weight at slaughter). Average slaughter weight from 2019 to 2022 was 666 kg.

* For more information on Health Canada Veterinary Drug Directorate's classes of antimicrobials of importance in human medicine, click [here](#) to view the **Antimicrobial and Antibiotic Backgrounder for Feedlot Cattle**.