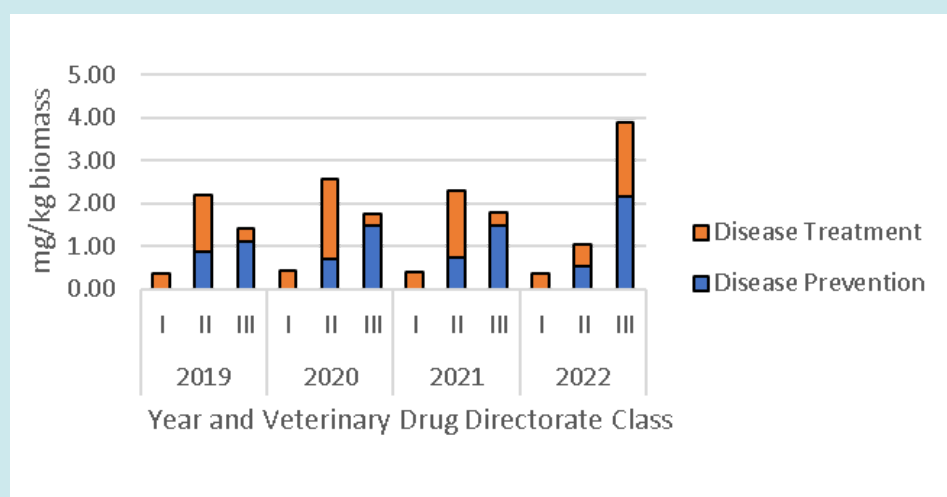


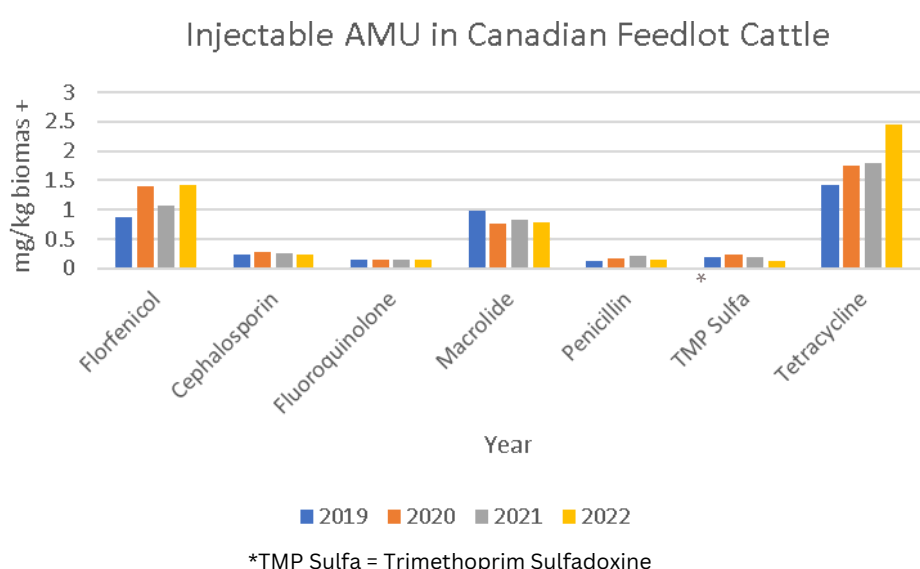
INJECTABLE ANTIMICROBIAL USE (AMU) IN CANADIAN FEEDLOT CATTLE 2019-2022



- AMU 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 37% (254 DOF), yearlings 62% (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.



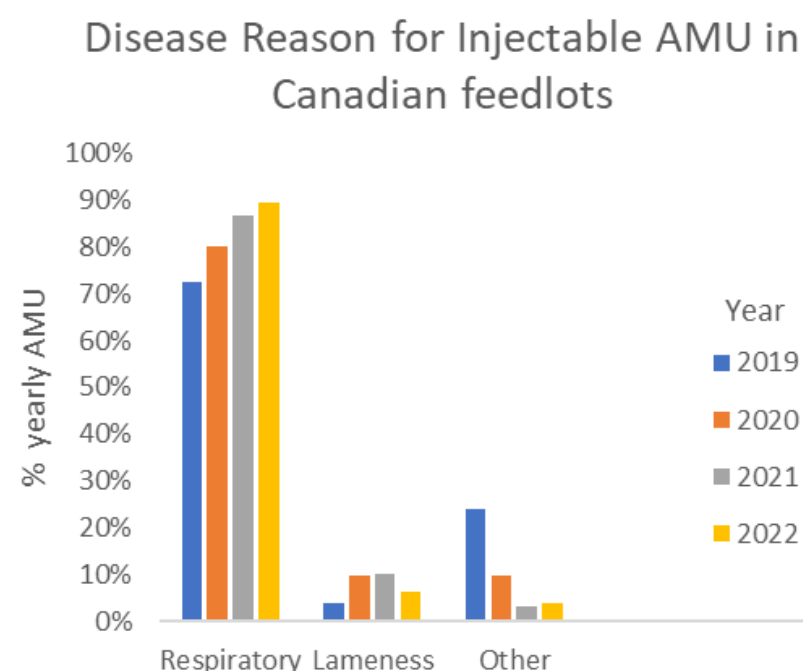
TETRACYCLINE AND FLORFENICOL, WHICH ARE ANTIMICROBIALS OF MEDIUM IMPORTANCE IN HUMAN MEDICINE, REPRESENTED 66% OF ALL INJECTABLE ANTIMICROBIAL USE IN FEEDLOT CATTLE.



- Tetracycline (Class III*) was the most used injectable antimicrobial (40%).
- Florfenicol (Class III*) was the second most used antimicrobial (26%).
- Macrolides, which include tulathromycin, tilmicosin, tildipirosin, and gamithromycin (Class II*) were the 3rd most used antimicrobial (18%).
- Cephalosporins (5%) and fluoroquinolones (3%), antimicrobials of very high importance in human medicine (Class I*), were used infrequently and only for disease treatment.

ANTIMICROBIALS OF VERY HIGH IMPORTANCE IN HUMAN MEDICINE (CLASS 1) WERE ONLY USED IN FEEDLOT CATTLE FOR DISEASE TREATMENT, REPRESENTING 8% OF ALL INJECTABLE ANTIMICROBIAL USE.

- Injectable antimicrobials were mainly used for the treatment and control of bovine respiratory disease (BRD).
- On feedlot arrival, 35% of the feedlot cattle were deemed high risk for BRD. Those at high risk for BRD may have received 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 lameness.
- Antimicrobials which were used to treat more than 1 disease, were mainly used to treat BRD.
- More injectable antimicrobials were used in calves than yearlings, mainly due to their higher risk of BRD.
- More injectable antimicrobials were used in auction market calves and yearlings than in ranch direct or backgrounded cattle.



VETERINARIANS SHOULD WORK WITH THEIR FEEDLOT CLIENTS, USING AN EVIDENCE-BASED APPROACH FOR DRUG USE, WITH IMPROVED DISEASE DIAGNOSTICS, ANIMAL HUSBANDRY, AND STRATEGIC VACCINATION.

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

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ON LINK TO VISIT US:**

[CANADIAN FEEDLOT ANTIMICROBIAL USE
AND ANTIMICROBIAL RESISTANCE
SURVEILLANCE PROGRAM \(CFAASP\)](https://www.cfaasp.ca)



+ 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**.

↳ Read the **CVMA Guidelines for Veterinary Antimicrobial Use in Beef Cattle** [here](#).