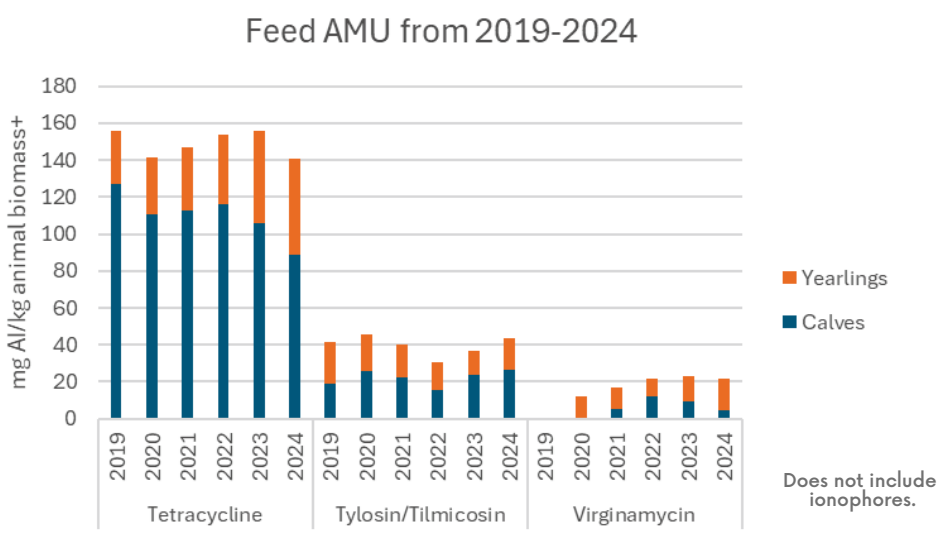
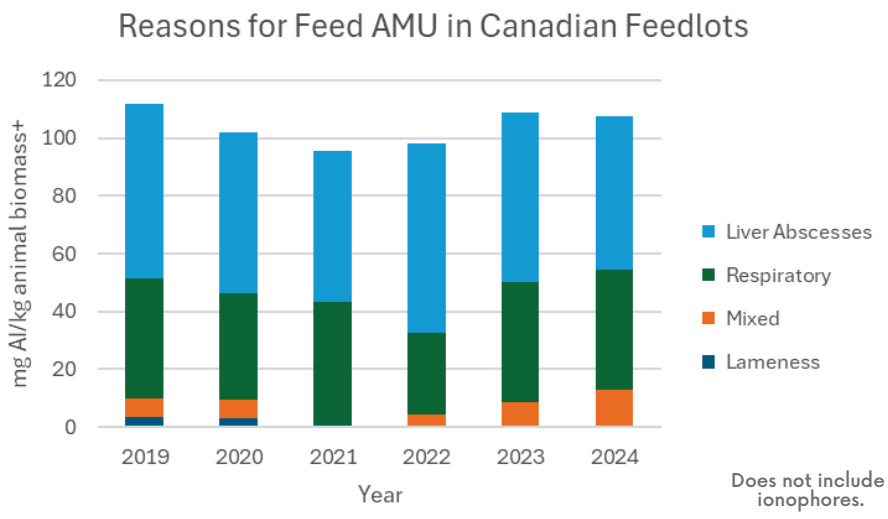
FEED ANTIMICROBIAL USE (AMU)
IN CANADIAN FEEDLOT CATTLE - CFAASP 2024

- AMU data were collected from 116,360 head of cattle in 359 randomly selected closed production lots, from 21 finishing feedlots in AB, SK, and ON.
- 50% were calves, 49% yearlings, and 1% adult cattle (cows/bulls).
- 60% originated from auction markets, 29% were backgrounded, and 11% were ranch direct.
- Average days on feed (DOF) was 213, with calves at 262 DOF and yearlings at 173 DOF.
- Average slaughter weight was 656 kg.
- 58% of the cattle were deemed high risk for bovine respiratory disease (BRD).
- 95% of all antimicrobials used in 2024 in Canadian feeders were administered in the feed.

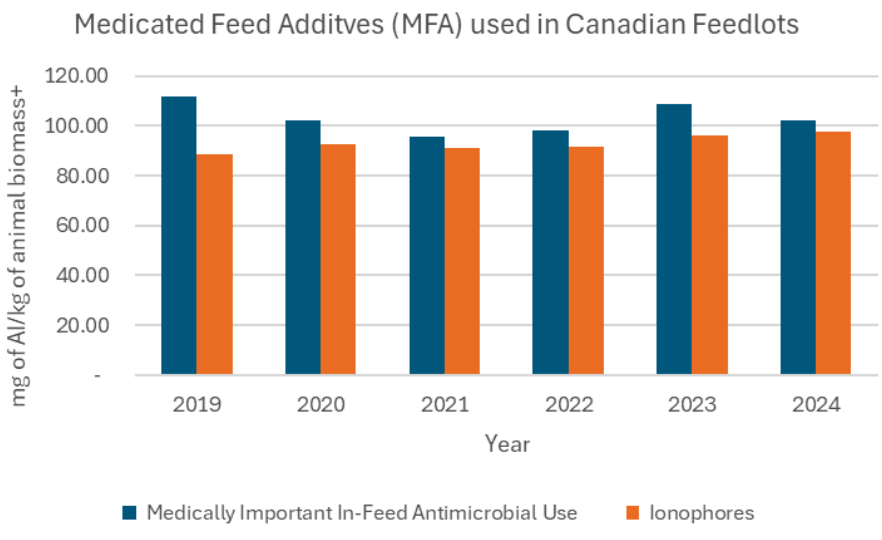
NO CLASS I ANTIMICROBIALS OF VERY HIGH IMPORTANCE IN HUMAN MEDICINE* WERE USED IN FEED.

- Tylosin and virginiamycin were used in feed to reduce liver abscesses. These drugs are Class II antimicrobials of high importance* in human medicine. Virginiamycin was licensed for use in cattle in Canada in 2019.
- Tetracycline, an antimicrobial of medium importance* in human medicine (Class III), was the most used feed antimicrobial in calves and yearlings from 2019-2024, representing 73% of all use. It was used to control liver abscesses and outbreaks of BRD/histophilosis, and foot rot (lameness), which are economically important production limiting diseases in Canadian feedlot cattle.





FROM 2019-2024, 56% OF ANTIMICROBIAL USE IN FEED (NOT INCLUDING IONOPHORES) WAS FOR LIVER ABSCESS PREVENTION AND CONTROL.†



- The largest reduction in antimicrobial use in Canadian feedlot cattle would occur if effective vaccines, natural feed additives, or practical feeding management changes, could be identified and used instead of in-feed antimicrobials to reduce liver abscesses and histophilosis. Research actively continues in this area, and we encourage producers, veterinarians, and nutritionists to stay informed.
- **Producers should review with their veterinarian and nutritionist, at least annually, current animal health, feeding, and lot closeout records to identify ways to reduce in-feed use of medically important antimicrobials for liver abscess, BRD, histophilosis, and lameness prevention/control.**

+ mg active ingredient (AI)/kg animal biomass = (mgs of all active ingredients administered in the feed 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 2024 was 661 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.**

Ionophores licensed for use in the feed for Canadian beef cattle include monensin, lasalocid, and salinomycin. Ionophores represented 47% of all in-feed use (mg active ingredient) of antimicrobials in Canadian feedlot cattle from 2019-2024. They were used to prevent coccidiosis, reduce gas bloat, and improve growth performance. Ionophores are not considered medically important because they are rarely used in human medicine*.

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

QUESTIONS? EMAIL US!

INFO@CFAASP.CA

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CANADIAN FEEDLOT ANTIMICROBIAL USE AND ANTIMICROBIAL RESISTANCE SURVEILLANCE PROGRAM (CFAASP)