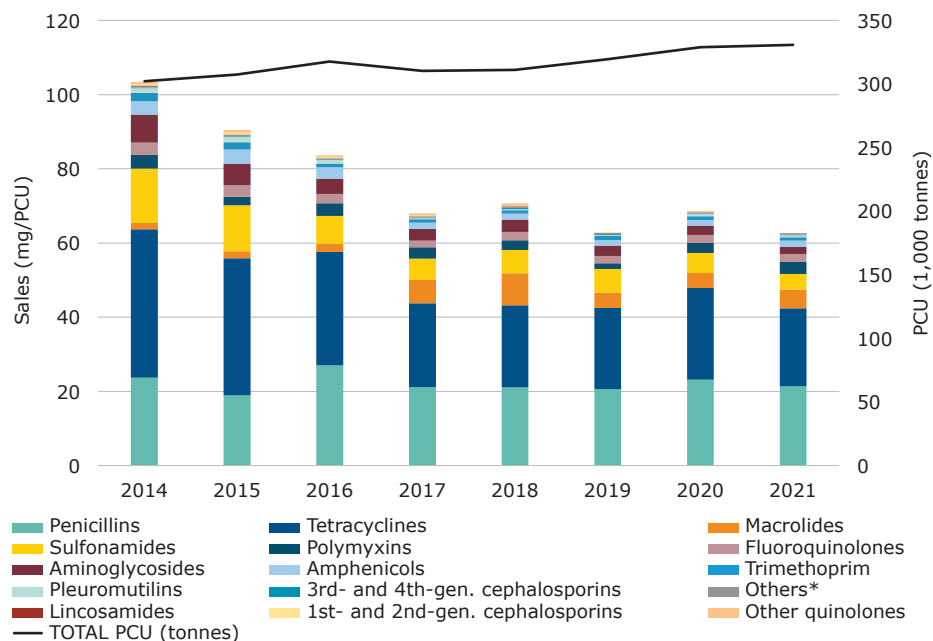


Sales trends (mg/PCU) of antibiotic VMPs for food-producing animals

Sales trends by antibacterial class (mg/PCU) from 2014 to 2021^{1,2}



¹ Sales data sorted from highest to lowest in 2021.

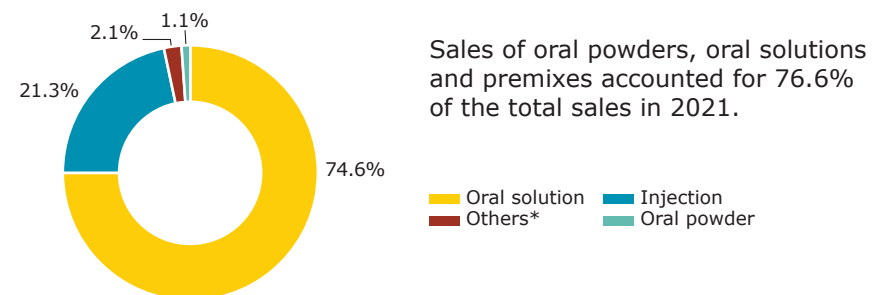
² For Croatia, double reporting was observed for sales of several VMPs between 2014 and 2017 and underreporting was observed in 2018.

* The class 'Others' includes sales of bacitracin, novobiocin and spectinomycin (classified as other antibacterials in the ATCvet system).

Since 2014:

- ⬇️ 39.4% overall annual sales (from 103.5 mg/PCU to 62.7 mg/PCU in 2021)
- ⬆️ 83.7% 3rd- and 4th-generation cephalosporin sales (from 0.12 mg/PCU to 0.22 mg/PCU in 2021)
- ⬇️ 33.9% fluoroquinolone sales (from 3.4 mg/PCU to 2.2 mg/PCU in 2021)
- ⬇️ 100% other quinolone sales (from 0.65 mg/PCU to 0 mg/PCU in 2021)
- ⬇️ 11.2% polymyxin sales (from 3.6 mg/PCU to 3.2 mg/PCU in 2021)
- ⬆️ The PCU increased by 9.4% between 2011 and 2021

Proportion of sales (mg/PCU) by product form in 2021^{1,2}



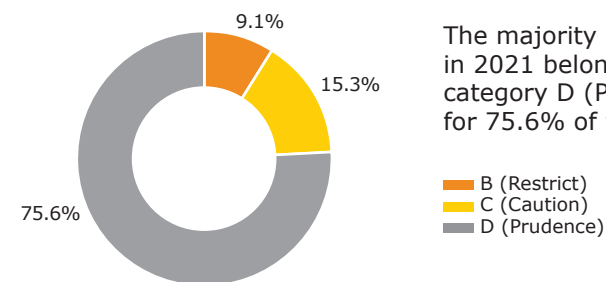
Sales of oral powders, oral solutions and premixes accounted for 76.6% of the total sales in 2021.

¹ Sales of premixes are not included in this figure and represent 0.8% of total sales.

² No sales of oral paste products in 2021.

* Other forms include intramammary, intrauterine, and bolus products.

Proportion of sales (mg/PCU) by AMEG categories in 2021¹



The majority of antibiotic VMP sales in 2021 belonged to the AMEG category D (Prudence), accounting for 75.6% of the total sales.

¹ Novobiocin is not included in the AMEG categorisation and accounts for 0.02% of the overall sales.

2021 sales data

In 2021, overall sales decreased by 8.7% in comparison to 2020 (from 68.6 mg/PCU to 62.7 mg/PCU). The three highest selling antibiotic classes were penicillins, tetracyclines and macrolides, which accounted for 34.1%, 33.5% and 8.1% of total sales, respectively.



Country information

In Croatia, all antimicrobial VMPs are prescription-only medicines. They are dispensed by pharmaceutical companies or wholesalers of VMPs to veterinary practices (surgeries, clinics and hospitals), veterinary pharmacies and feed mills. Animal owners can only buy antimicrobial VMPs on veterinary prescription in a veterinary pharmacy.

Large farms have authorised their own veterinary practices for their animals and can buy premixes on veterinary prescription from a veterinary pharmacy to use in feed mills. Feed mills should have a record of veterinary prescriptions covering each amount of antimicrobial VMP used.

The collection of sales data by wholesalers is based on the national law, published in the Official Gazette of the Republic of Croatia, No. 84/08, 56/13, 94/13, 15/15 and 32/19.

Sales data for veterinary antimicrobial agents are obtained each year from the authorised wholesalers.