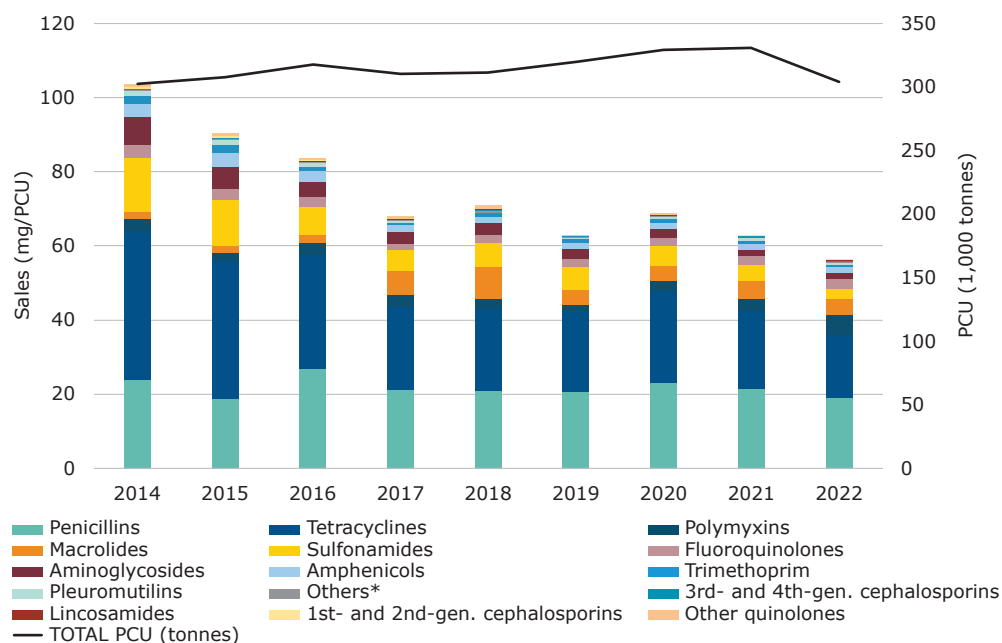


# Sales trends (mg/PCU) of antibiotic VMPs for food-producing animals

## Sales trends by antibacterial class (mg/PCU) from 2014 to 2022<sup>1,2</sup>



<sup>1</sup> Sales data sorted from highest to lowest in 2022.

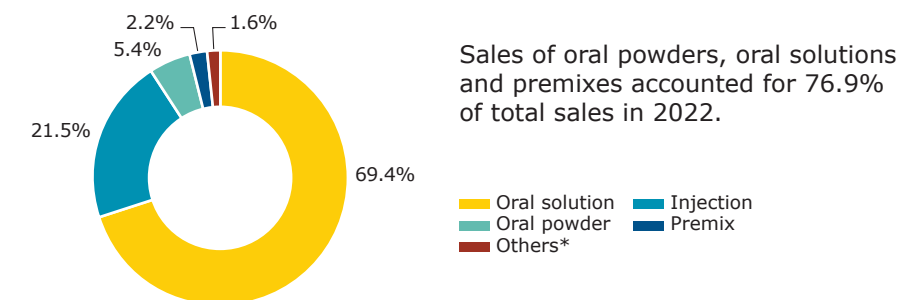
<sup>2</sup> Double reporting was observed for sales of several VMPs between 2014 and 2017.

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

### Since 2014:

- ↓ 45.7% overall annual sales (from 103.5 mg/PCU to 56.2 mg/PCU in 2022)
- ↑ 92.6% 3rd- and 4th-generation cephalosporins sales (from 0.12 mg/PCU to 0.23 mg/PCU in 2022)
- ↓ 22.9% fluoroquinolones sales (from 3.4 mg/PCU to 2.6 mg/PCU in 2022)
- ↓ 100% other quinolones sales (from 0.65 mg/PCU to 0 mg/PCU since 2021)
- ↑ 52.5% polymyxins sales (from 3.6 mg/PCU to 5.6 mg/PCU in 2022)
- ↑ PCU increased by 0.6% between 2014 and 2022

## Proportion of sales (mg/PCU) by product form in 2022<sup>1</sup>

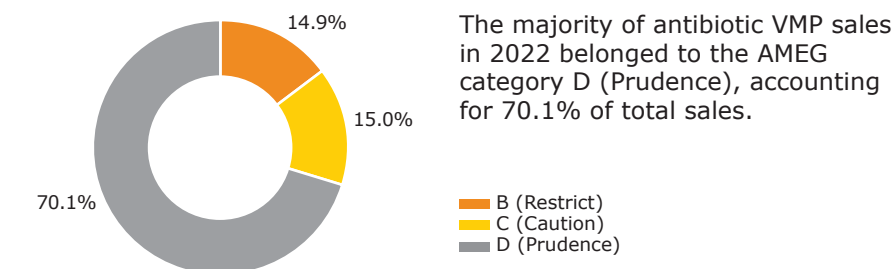


Sales of oral powders, oral solutions and premixes accounted for 76.9% of total sales in 2022.

<sup>1</sup> No sales of oral paste products in 2022.

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

## Proportion of sales (mg/PCU) by AMEG categories in 2022<sup>1</sup>



The majority of antibiotic VMP sales in 2022 belonged to the AMEG category D (Prudence), accounting for 70.1% of total sales.

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

## 2022 sales data

In 2022, overall sales decreased by 10.3% in comparison to 2021 (from 62.7 mg/PCU to 56.2 mg/PCU). The three highest selling antibiotic classes were penicillins, tetracyclines and polymyxins, which accounted for 34.0%, 30.1% and 9.9% 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 by 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, Nos 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.

Although the overall sales of antibacterials decreased by 10.3% in comparison to 2021, an increase in sales of AMEG category B (polymyxins) from 9.1% in 2021 to 14.9% in 2022 was due to a significant reduction in the prices of generic polymyxins compared to the originator. Consequently, there was a shift between AMEG category D (75.6% in 2021 and 70.1% in 2022) and AMEG category B (9.1% in 2021 and 14.9% in 2022).