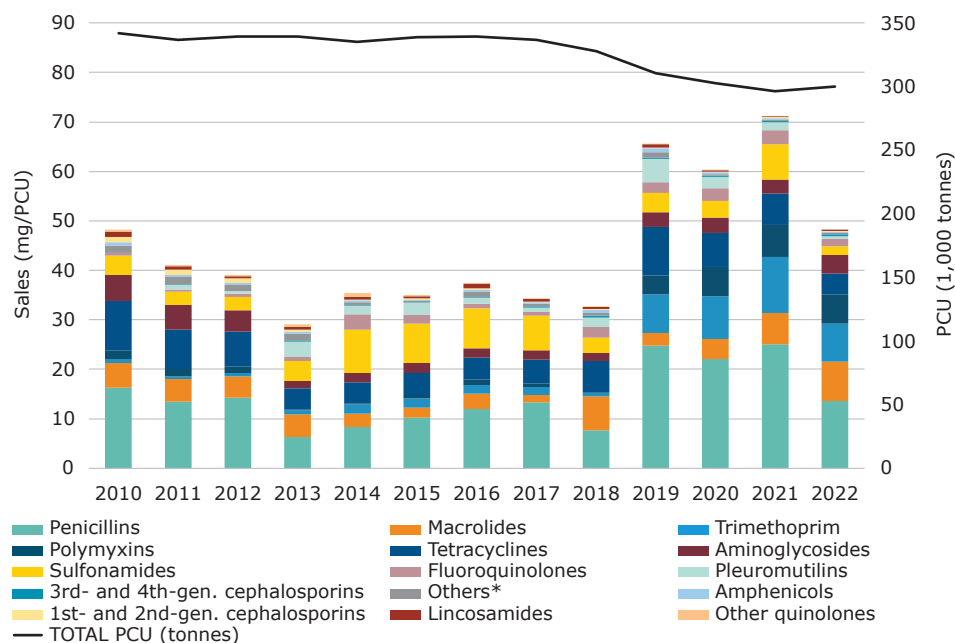


## Sales trends (mg/PCU) of antibiotic VMPs for food-producing animals

### Sales trends by antibiotic class (mg/PCU) from 2010 to 2022<sup>1,2,3</sup>



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

<sup>2</sup> No sales of other quinolones in 2021 and 2022.

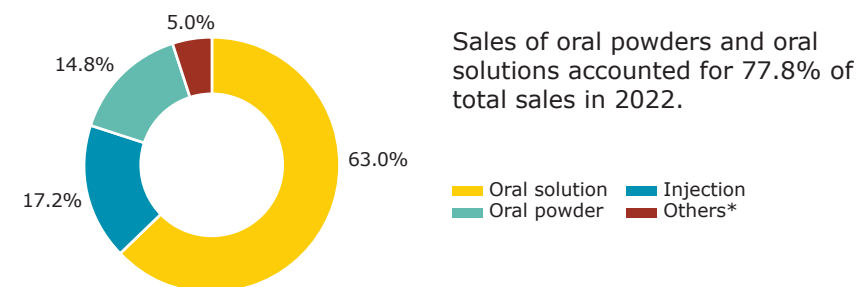
<sup>3</sup> During validation of 2022 data, underreporting of wholesalers was identified for 2019–2021. Data for this period have been recalculated and the corrected information uploaded into the ESVAC application.

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

### Since 2011:

- ⬆️ 17.4% overall annual sales (from 41.1 mg/PCU to 48.2 mg/PCU in 2022)
- ⬆️ 10-fold 3rd- and 4th-generation cephalosporin sales (from 0.04 mg/PCU to 0.42 mg/PCU in 2022)
- ⬆️ 4-fold fluoroquinolone sales (from 0.39 mg/PCU to 1.5 mg/PCU in 2022)
- ⬇️ 100% other quinolone sales (from 0.21 mg/PCU to 0 mg/PCU since 2021)
- ⬆️ 4-fold polymyxin sales (from 1.4 mg/PCU to 5.8 mg/PCU in 2022)
- ⬇️ PCU decreased by 10.8% between 2011 and 2022

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

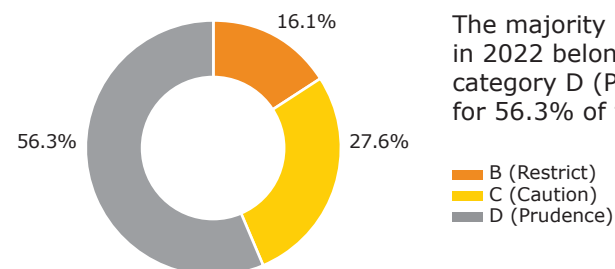


Sales of oral powders and oral solutions accounted for 77.8% of total sales in 2022.

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

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

### Proportion of sales (mg/PCU) by AMEG categories in 2022



The majority of antibiotic VMP sales in 2022 belonged to the AMEG category D (Prudence), accounting for 56.3% of total sales.

### 2022 sales data

In 2022, overall sales decreased by 32.3% in comparison to 2021 (from 71.2 mg/PCU to 48.2 mg/PCU). The three highest selling antibiotic classes were penicillins, macrolides and trimethoprim, which accounted for 28.1%, 16.6% and 16% of total sales, respectively.

## Country information

The State Food and Veterinary Service (SFVS) of Lithuania recently recalculated the sales data for the period 2019–2021, which were submitted to ESVAC. This was due to several wholesalers failing to submit their reports for this period, resulting in a discrepancy in the data. To investigate the matter, a working group was set up by the Director of the SFVS to review the reports for the missing years. As a result of the recalculation, the correct data were resubmitted to ESVAC and are now reflected in the ESVAC database. It is important to note that the datasets for 2019–2022 do not include tablet sales. The updated sales data for 2019–2021 showed a significant increase of 2.9–3.5-fold in sales for food-producing animals, ranging from 20.8 to 65.6 mg/PCU, 20.5 to 60.2 mg/PCU, and 20.3 to 71.2 mg/PCU in 2019, 2020 and 2021, respectively. However, it is advisable to exercise caution when interpreting trends and drawing conclusions from the data reported prior to 2019, as it is not feasible to verify their accuracy.

The SFVS, together with the Ministry of Health, developed a national action plan against antimicrobial resistance for 2017–2020. Moreover, SFVS adopted its own 2015–2020 action plan against antimicrobial resistance in the veterinary and agricultural sectors. From 2020, the action plan against antimicrobial resistance in the veterinary and agricultural sectors is updated annually. Key elements of the antimicrobial resistance action plan are prudent use of antibiotics in animals; restricting off-label use; reducing overall sales of antibiotics for use in animals; and organising training for veterinarians, farmers, animal owners and feed manufacturers on the prudent use of antimicrobial agents in animals.

In addition, a new method for sales data collection was implemented in 2021 by using the national electronic veterinary prescription system (veterinary medicinal products accounting information system).

Moreover, SFVS annually implement the monitoring of antimicrobial resistance in zoonotic and commensal bacteria in certain food-producing animal populations and food (2014–2020 in accordance with 2013/652/EU, and from 2021 in accordance with the European Commission implementing decisions (EU) 2020/1729).

It can be assumed that due to the situation during the COVID-19 pandemic, farms may have stockpiled more antimicrobials in 2021, which may have led to a decrease in antimicrobial sales in 2022. Oral powders are mostly used for systemic treatment, but as farms have modernised, it can be assumed that more attention is now being paid to individual animal diseases and farm animals being treated individually.