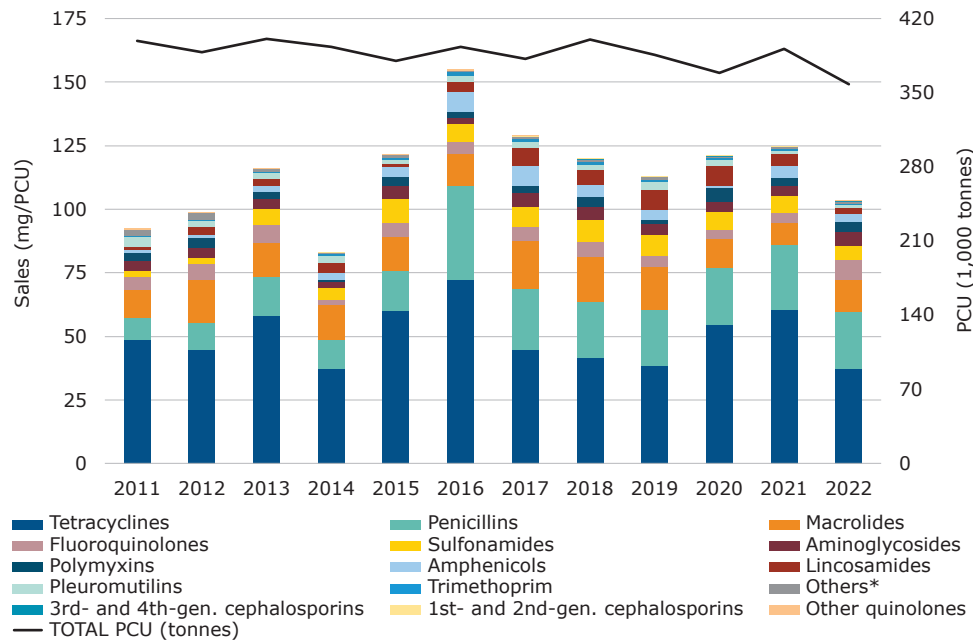


BULGARIA

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

Sales trends by antibacterial class (mg/PCU) from 2011 to 2022^{1,2,3}



¹ Sales data sorted from highest to lowest in 2022.

² No sales of other quinolones were reported in 2014, 2018, 2019, 2020 and 2021.

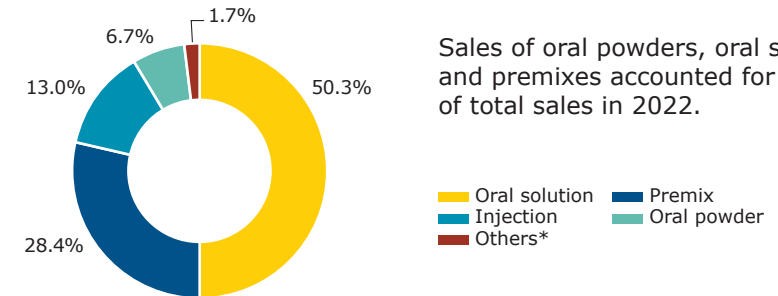
³ 2011, 2012, 2014 and 2015 are underestimates, as several wholesalers failed to report data.

* The class 'Others' includes sales of imidazole derivatives (metronidazole) and other antibacterials (bacitracin, nitroloxline, rifaximin and spectinomycin). Of note is that some of the sales could be for non-food-producing animals.

Since 2011:

- ⬆️ 11.5% overall annual sales (from 92.6 mg/PCU to 103.2 mg/PCU in 2022)
- ⬆️ 5-fold 3rd- and 4th-generation cephalosporins sales (from 0.05 mg/PCU to 0.25 mg/PCU in 2022)
- ⬆️ 58.0% fluoroquinolones sales (from 5.0 mg/PCU to 7.8 mg/PCU in 2022)
- ⬇️ 97.8% other quinolones sales (from 0.43 mg/PCU to 0.01 mg/PCU in 2022)
- ⬆️ 23.4% polymyxins sales (from 3.2 mg/PCU to 3.9 mg/PCU in 2022)
- ⬇️ PCU decreased by 10.2% between 2011 and 2022

Proportion of sales (mg/PCU) by product form in 2022¹

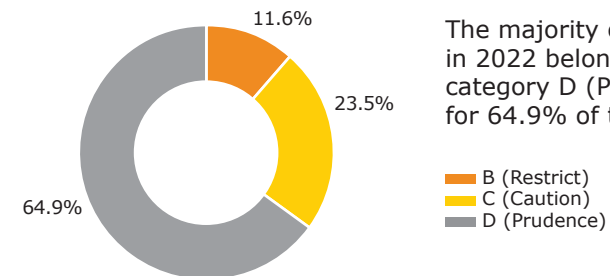


Sales of oral powders, oral solutions and premixes accounted for 85.3% of total sales in 2022.

¹ No sales of bolus and oral paste products in 2022.

* Other forms include intramammary and intrauterine 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 64.9% of total sales.

2022 sales data

In 2022, overall sales decreased by 17.1% in comparison to 2021 (from 124.5 mg/PCU to 103.2 mg/PCU). The three highest selling antibiotic classes were tetracyclines, penicillins and macrolides, which accounted for 36.1%, 22.1% and 11.8% of total sales, respectively.

Country information

Despite an overall sales decrease of 17.1% between 2021 and 2022 being mostly due to the reduction of premix and tetracycline sales, sales of most other substances increased, namely fluoroquinolones and polymyxins. The increase in sales of these AMEG category B substances is related to the marketing authorisation of 6 new products.

In 2017, Bulgaria introduced a national data collection system for sales of antimicrobial VMPs, supported by the introduction of national legislation. Underreporting of sales in years up to and including 2015 cannot be excluded. The system is currently under development to allow for the collection of data at sites where antimicrobials are used (reporting by registered veterinarians and animal owners) by means of an electronic tool. It is expected that this electronic system will subsequently evolve into a module to a complete electronic information system in agriculture. The development of the system for collecting and reporting data on sales and the use of antimicrobial products is currently assisted by the implementation of a EU-funded project 101103293 – BFSA -AMRTool, which aims to achieve compliance with the requirements of Regulation (EU) 2019/6.

The Bulgarian Food Safety Agency (BFSA) has established an Expert Council on Antimicrobial Resistance, which includes all directorates of the agency involved in activity related to the use of VMPs. Its main activities are:

- to develop and implement policy and legislation with regard to antimicrobial resistance;
- to develop objective and measurable criteria for assessing the results of the implementation of the guidance for prudent use of antimicrobials in veterinary activity;
- to enhance collaboration of BFSA directorates in the development of good practices in relation to antimicrobial resistance, for example in the prevention and control of infections to improve animal health and welfare.