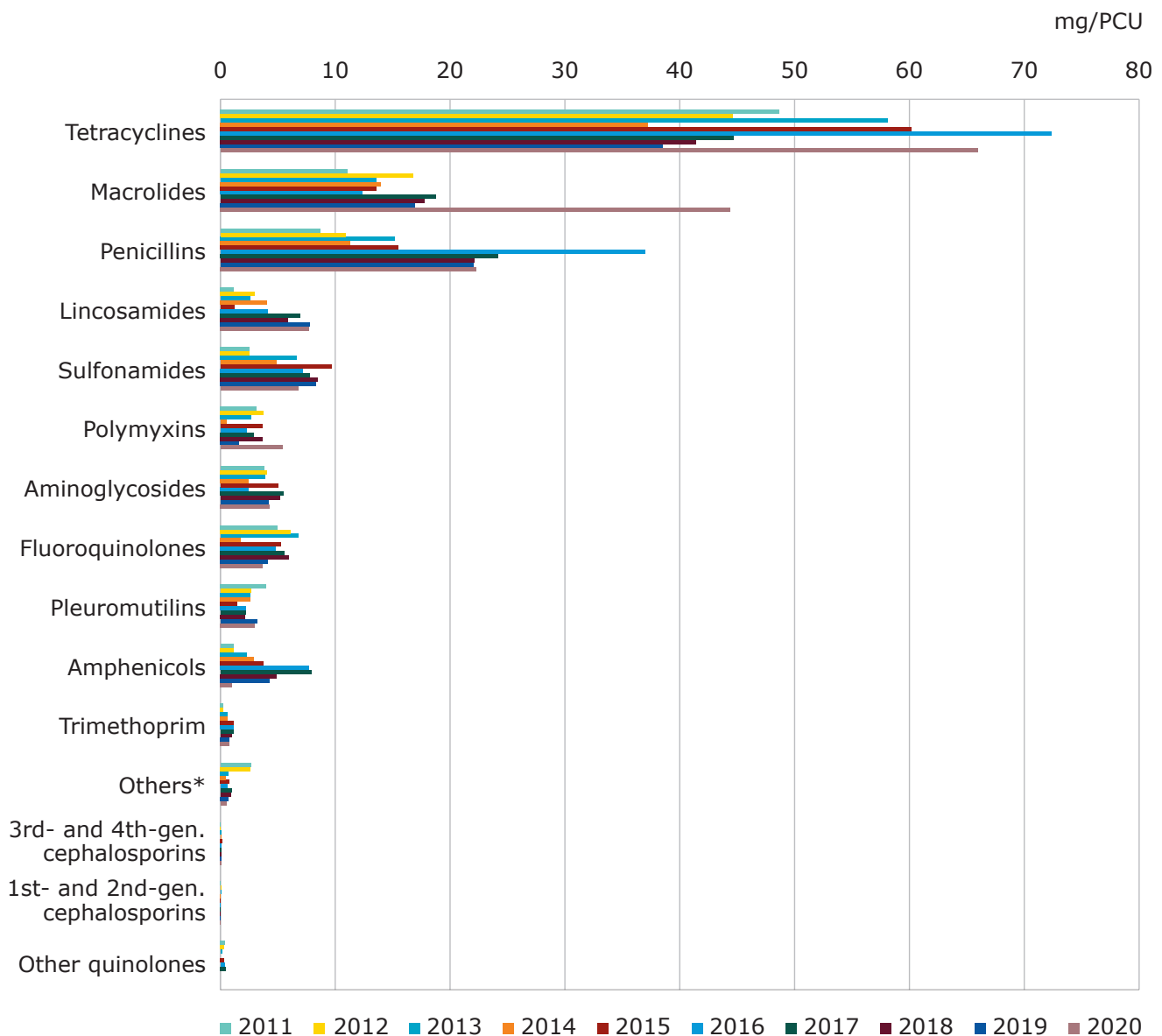




SALES TRENDS (MG/PCU) OF ANTIMICROBIAL VMPs FOR FOOD-PRODUCING ANIMALS

2011-2020



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

Under-reporting in 2011, 2012, 2014 and 2015, as several wholesalers failed to report data. 2020 data are overestimated as double reporting of sales could not be excluded.

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

In reference to 2011 (92.6 mg/PCU), sales in 2020 were 79.3% higher (166 mg/PCU). This difference can be partially explained by significant under-reporting of sales for previous years, particularly for water-soluble VMPs and premixes.

An overall increase of 47.3% in total sales of antimicrobial VMPs in 2020 was observed with reference to 2019 (112.7 mg/PCU). This is mostly explained by the 71.2% and 161.9% increases in sales of tetracyclines and macrolides, respectively. However, 2020 data are overestimated due to double reporting of some VMPs by MAHs and reporting of export sales not intended for the Bulgarian market.

Tetracyclines (39.7%) and macrolides (26.8%) were the highest-selling VMPs in Bulgaria in 2020, followed by penicillins (13.4%), lincosamides (4.7%), sulfonamides (4.1%), polymyxins (3.3%), aminoglycosides (2.6%), fluoroquinolones (2.2%) and pleuromutilins (1.8%).

In 2020, sales of 3rd- and 4th-generation cephalosporins represented 0.07% (0.11 mg/PCU) of total sales. In comparison with 2011 sales (0.05 mg/PCU), 2020 figures were 126.2% higher, and in comparison with 2019 (0.09 mg/PCU), sales grew by 15.8%. Aggregated sales across the 25 countries were 0.16 mg/PCU.

Sales of fluoroquinolones in 2020 (3.66 mg/PCU) were 26.2% and 11.6% lower than in 2011 (4.96 mg/PCU) and 2019 (4.14 mg/PCU), respectively. Aggregated sales for the 25 countries were 2.21 mg/PCU.

Sales of polymyxins peaked in 2020 at 5.41 mg/PCU, corresponding to an increase of 70.6% from 2011 (3.17 mg/PCU) and of 230.5% from 2019 (1.64 mg/PCU). Aggregated sales of polymyxins for the 25 countries were 2.58 mg/PCU.

From 2011 (11.04 mg/PCU) to 2020 (44.4 mg/PCU), a 302.3% increase in sales of macrolides was observed.

In 2017, Bulgaria introduced a national data collection system for sales of antimicrobial VMPs, supported by the introduction of national legislation. The new system requires veterinarians to report any prescription and administration of medicines to animals and also includes data provided by wholesalers and retailers. Until now, it has only been possible to obtain data from some MAHs, so under-reporting of sales in years up to and including 2015 cannot be excluded. The new system will also allow for the collection of data at sites where antimicrobials are used (reporting by registered veterinarians and animal owners).

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 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.

