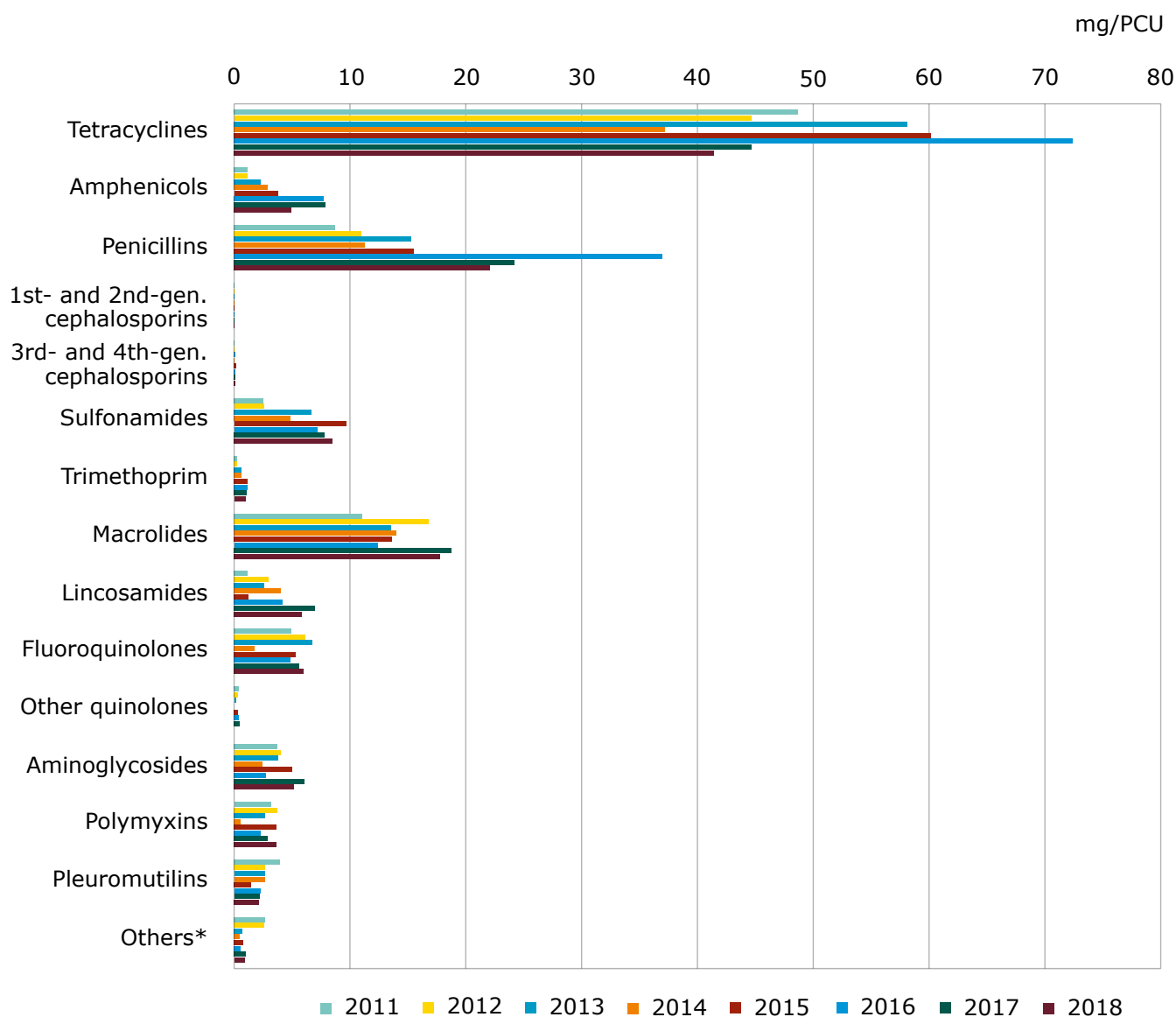


# BULGARIA



## CHANGES IN SALES (MG/PCU) ACROSS YEARS



\* Other antibacterials (classified as such in the ATCvet system).

In reference to 2011 (92.6 mg/PCU), the increase of sales in 2018 (119.6 mg/PCU) reached 29%. This difference in sales can be partially explained by significant underreporting in sales for previous years, particularly for water-soluble VMPs and premixes.

An overall decrease of 8% in the total consumption of antimicrobial VMPs in 2018 was observed with reference to 2017 (129.8 mg/PCU) sales in mg/PCU. This decrease is mostly due to the drop in sales of tetracyclines (7%), penicillins (9%) and amphenicols (38%).

Following the patterns already observed in the period 2011-2017, tetracyclines (35%) and penicillins (18%) were the most sold antimicrobial veterinary medicinal products in Bulgaria in 2018, followed by macrolides (15%), sulfonamides (7%), amphenicols (4%), fluoroquinolones (5%), lincosamides (5%) and aminoglycosides (4%).

In 2018, 3rd- and 4th-generation cephalosporins were sold in larger quantities than cephalosporins of the 1st- and 2nd-generations, but sales of this class of antimicrobials were still relatively low during the study period, representing 0.1% of total sales in 2018 (0.091 mg/PCU). In comparison with 2011 (0.048 mg/PCU), this corresponds to an increase of 90% in sales and of 5% in comparison with 2017 (0.087 mg/PCU). The aggregated sales across the 25 countries were 0.18 mg/PCU.

The sales of fluoroquinolones in 2018 were 5.99 mg/PCU, corresponding to an increase of 21% from 2011 (4.96 mg/PCU) and of 7% from 2017 (5.60 mg/PCU). The aggregated sales for the 25 countries were 2.42 mg/PCU.

For other quinolones, no sales were reported in 2018.

The sales of polymyxins in 2018 were 3.69 mg/PCU, corresponding to an increase of 16% from 2011 (3.17 mg/PCU) and of 27% from 2017 (2.91 mg/PCU). The aggregated sales of polymyxins for the 25 countries were 3.31 mg/PCU.

From 2011 (11.04 mg/PCU) to 2018 (17.76 mg/PCU), an increase in the sales of macrolides (61%) was also 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 Marketing Authorisation Holders (MAHs), therefore an underreporting of sales in 2015 and previous years 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 Authority (BFSA) has established an Expert Council on Antimicrobial Resistance, which includes all directorates of the agency with activity related to use of VMPs and whose 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.

