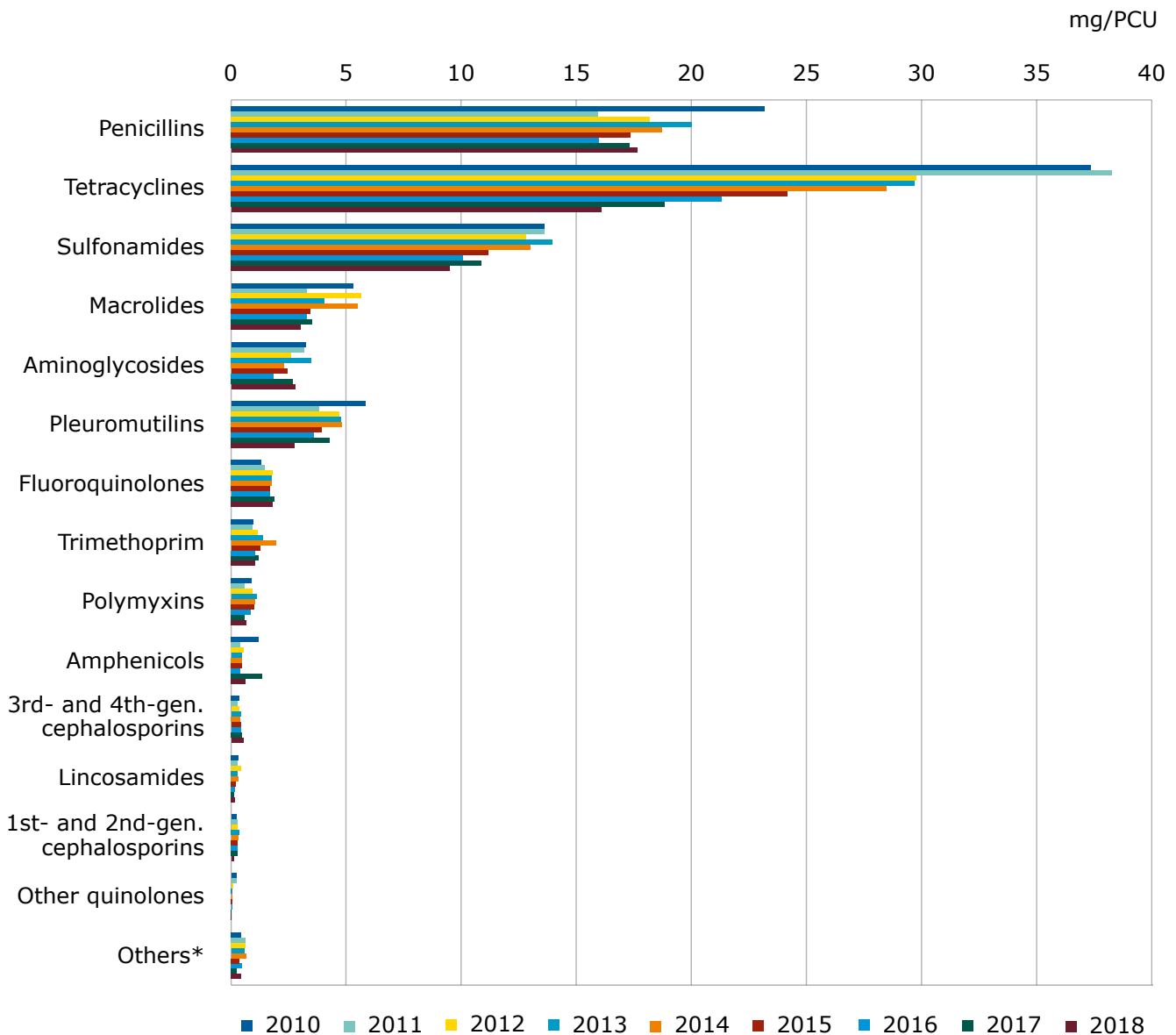


CZECHIA



CHANGES IN SALES (MG/PCU) ACROSS YEARS



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

From 2010 (94.3 mg/PCU) to 2018 (57.0 mg/PCU), total sales fell by 40% in Czechia. The largest decreases (in mg/PCU) were observed for tetracyclines (by 57%) and sulfonamides (by 30%). In 2018, penicillins, tetracyclines and sulfonamides were the most-sold classes, representing 31%, 28% and 17% of total annual sales, respectively. Of note is that in 2018, penicillins surpassed tetracyclines as the most-sold class. In comparison with 2017 (63.6 mg/PCU), total sales dropped by 10% in 2018.

For 3rd- and 4th-generation cephalosporins, sales increased by 43% from 2010 (0.37 mg/PCU) to 2018 (0.53 mg/PCU) and by 13% from 2017 (0.47 mg/PCU) to 2018, while the aggregated sales for 25 countries were 0.18 mg/PCU.

Sales of fluoroquinolones were 1.79 mg/PCU in 2018, representing an increase of 36% from 2010 (1.31 mg/PCU), but also a decrease of 6% from 2017 (1.89 mg/PCU), while the aggregated sales for 25 countries were 2.42 mg/PCU.

For other quinolones, sales dropped sharply by 98% from 2010 (0.22 mg/PCU) to 2018 (0.004 mg/PCU) and by 60% from 2017 (0.01 mg/PCU) to 2018, being significantly below the aggregated sales for the 25 countries (0.27 mg/PCU).

For polymyxins, of which consumption has traditionally been low in Czechia, sales decreased by 25% from 2010 (0.89 mg/PCU) to 2018 (0.67 mg/PCU) and increased by 11% from 2017 (0.60 mg/PCU) to 2018. The aggregated sales for 25 countries were 3.31 mg/PCU.

More in-depth analysis of the reasons for antimicrobial use in individual groups/VMPs and species and categories of animals has been done in cooperation with different stakeholders in animal health services. This was carried out to indicate further space for improvement under ongoing activities in the Czech National Action Plan against antimicrobial resistance (CZ NAP 2019-2022).

The decrease in total sales could be partly due to a reduction in the use of herd/flock medication (with a significant decrease of 73%) in use within the group of medicated premixes from 2010 to 2018. More targeted and individualised use of antimicrobials administered in drinking water to better defined limited groups/individual animals was one of the main drivers in the drop in use of premixes and overall sales. Gradual but continuous improvement of herd/flock management measures as well as the introduction of new technologies, leading to better animal health, is another factor of significant importance. Decrease in use was also caused by: in the pigs, repopulations and specific pathogen-free (SPF) herds together with improvement of animal care (especially piglets at weaning); in the dairy sector, in-house microbiological tests and increased use of narrow spectrum penicillins; in the poultry sector, improving biosecurity and care for parent flocks and one-day-old chicks and use of other tools to prevent disease, tailored to flock conditions (vaccination, phytoadditives, enzymes, vitamins), that possibly influenced the decrease in sales of fluoroquinolones in the period 2017-2018.

Responsible and more targeted use of antimicrobials can also be linked to the monitoring of susceptibility/resistance of target veterinary pathogens (since 2015), a project initiated by a working group on antimicrobials led by the Ministry of Agriculture. Monitoring results, as well as results of minimum inhibitory concentrations (MICs) are made available to veterinarians, while training courses to raise awareness of antimicrobial resistance are organised for veterinarians. The focus of recent activities has been on identifying tools for improvement that can be effectively implemented within the CZ NAP to achieve the minimum necessary use of antimicrobials.

In Czechia, a fact-finding mission on antimicrobial resistance was carried out between 20 and 24 June 2016 (report not published) and concluded that 'several aspects of the policies in place may serve as potential examples of good practice to other Member States'.

