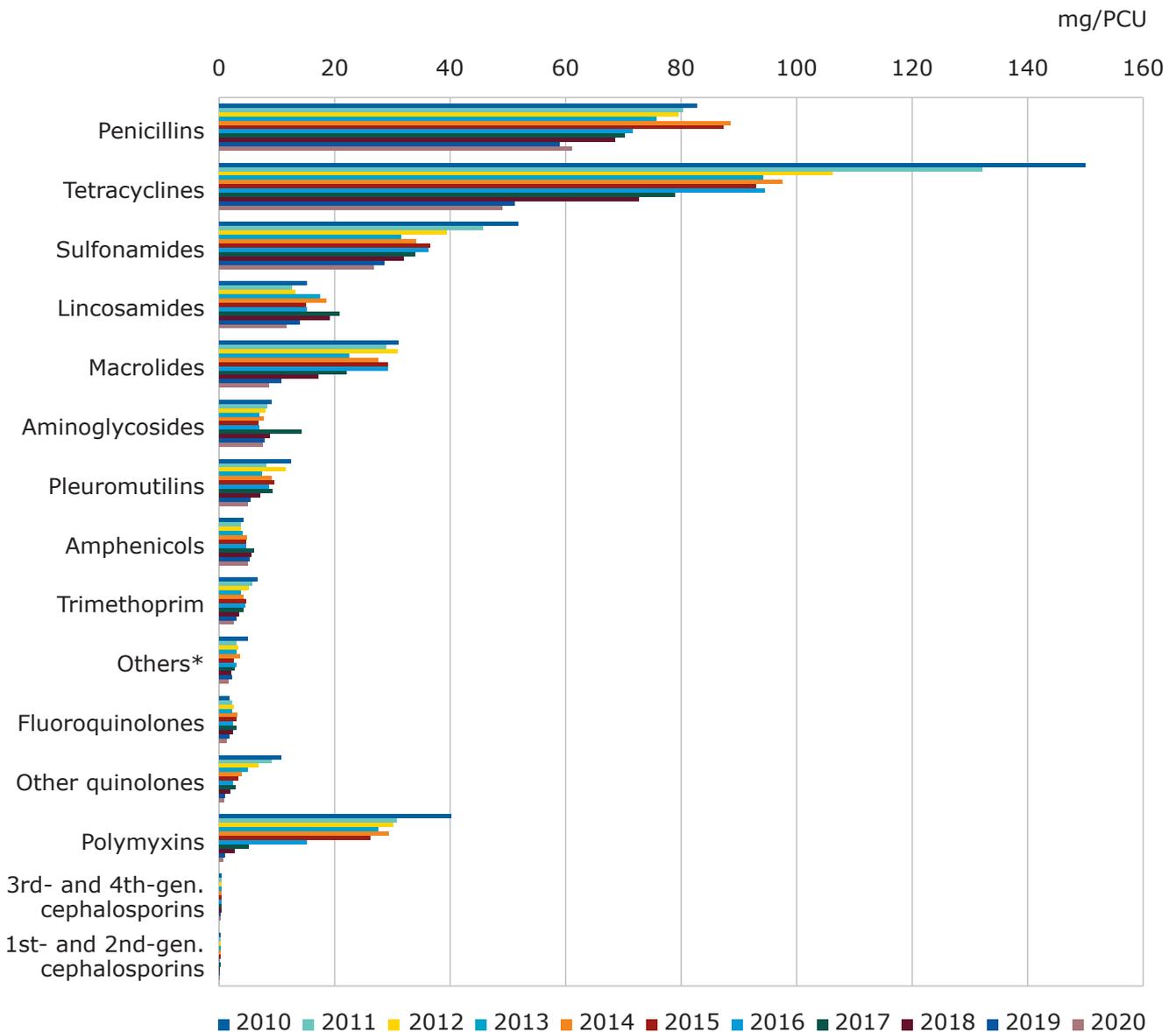




SALES TRENDS (MG/PCU) OF ANTIMICROBIAL VMPs FOR FOOD-PRODUCING ANIMALS

2010-2020



For Italy, sales data represent sales from MAH to wholesalers and feed mills for 2010–2019. For 2020, they represent sales of premixes from MAHs to wholesalers, and for all other pharmaceutical forms dispensed e-prescription obtained from wholesalers and pharmacies to veterinarians, farmers and companion animal owners.

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

A 51% reduction in annual sales of antimicrobials was observed in 2020 (181.8 mg/PCU) compared with 2011 (371 mg/PCU). There appears to be a correlation between this fall and a general reduction in sales of most therapeutic classes, in particular tetracyclines, penicillins, sulfonamides, macrolides and polymyxins. In 2020, the highest-selling antimicrobial classes were penicillins, tetracyclines and sulfonamides, accounting for 33.6%, 26.9% and 14.7%, respectively, of total sales. From 2010 to 2020, a decrease of 17% in PCU was observed.

Sales of 3rd- and 4th-generation cephalosporins were relatively stable during the period 2010 to 2020, accounting for approximately 0.1% of total sales each year. In 2020, sales of 3rd- and 4th-generation cephalosporins were 0.16 mg/PCU, while the total sales figure for the 25 countries was 0.16 mg/PCU.

In 2020, sales of fluoroquinolones accounted for 0.68% (1.23 mg/PCU) of total annual sales, while in 2011 they accounted for 0.59% (2.19 mg/PCU). Aggregated sales of fluoroquinolones for the 25 countries in 2020 were 2.21 mg/PCU.

Sales of polymyxins fell by 97.7% in 2020 compared with 2011. In 2020, sales of polymyxins in Italy were 0.7 mg/PCU, accounting for 0.39% of the annual total. Aggregated sales for the 25 countries were 2.58 mg/PCU.

For other quinolones, sales fell by 91.4% in 2020 in comparison to 2011. In 2020, sales of other quinolones were 0.78 mg/PCU, representing 0.43% of total sales, while aggregated sales for the 25 countries were 0.16 mg/PCU.

Sales of macrolides fell by 70% in 2020 compared to 2011. In 2020, sales were 8.68 mg/PCU, representing 4.8% of total annual sales.

In April 2019, Italy adopted a computerised traceability system for the veterinary medicine supply chain. This VMP traceability system includes a central database for detecting the movements of packs of VMPs (sales data) along the production and distribution chains, from the producer to the first recipient (wholesaler, pharmacy, feed mill), and an electronic veterinary prescription database for tracking VMPs from their prescription by the veterinarian to the end-user (veterinarian, breeder authorised to produce medicated feed for own-use, persons keeping companion animals) who will administer it to the animals (use data). Due to the implementation of this new system, the data source for 2020 has changed from sales from MAHs to dispensed e-prescriptions, except for premixes.

Furthermore, the integrated system to categorise farms according to their risk of selection and dissemination of antimicrobial resistance microorganisms has been completed in 2020 for the bovine, pig and poultry sectors. This system uses the data collected by the traceability system of VMPs, particularly use data, to define indicators of antibiotic use on farms, calculated using Defined Daily Dose Animal for Italy (DDDAit). It also collects and analyses information on other aspects of animal health, welfare and management standards. The availability of these data at the farm level represents an important step toward the development of an adequate antimicrobial stewardship programme. The system will be extended to other animal species in the coming years.

The National Action Plan against Antimicrobial Resistance, launched on 2 November 2017, sets a target of a 10% reduction (compared to 2016) in three years in the use of critically important antimicrobials and a recommended reduction in sales of colistin of 5 mg/PCU. The data show progress towards the achievement of the objectives.

A fact-finding mission was carried out in Italy between 8 and 16 November 2018 in order to gather information on the prudent use of antimicrobials in animals¹.

¹ https://ec.europa.eu/food/audits-analysis/audit_reports/details.cfm?rep_id=4111&rep_inspection_ref=xxx

