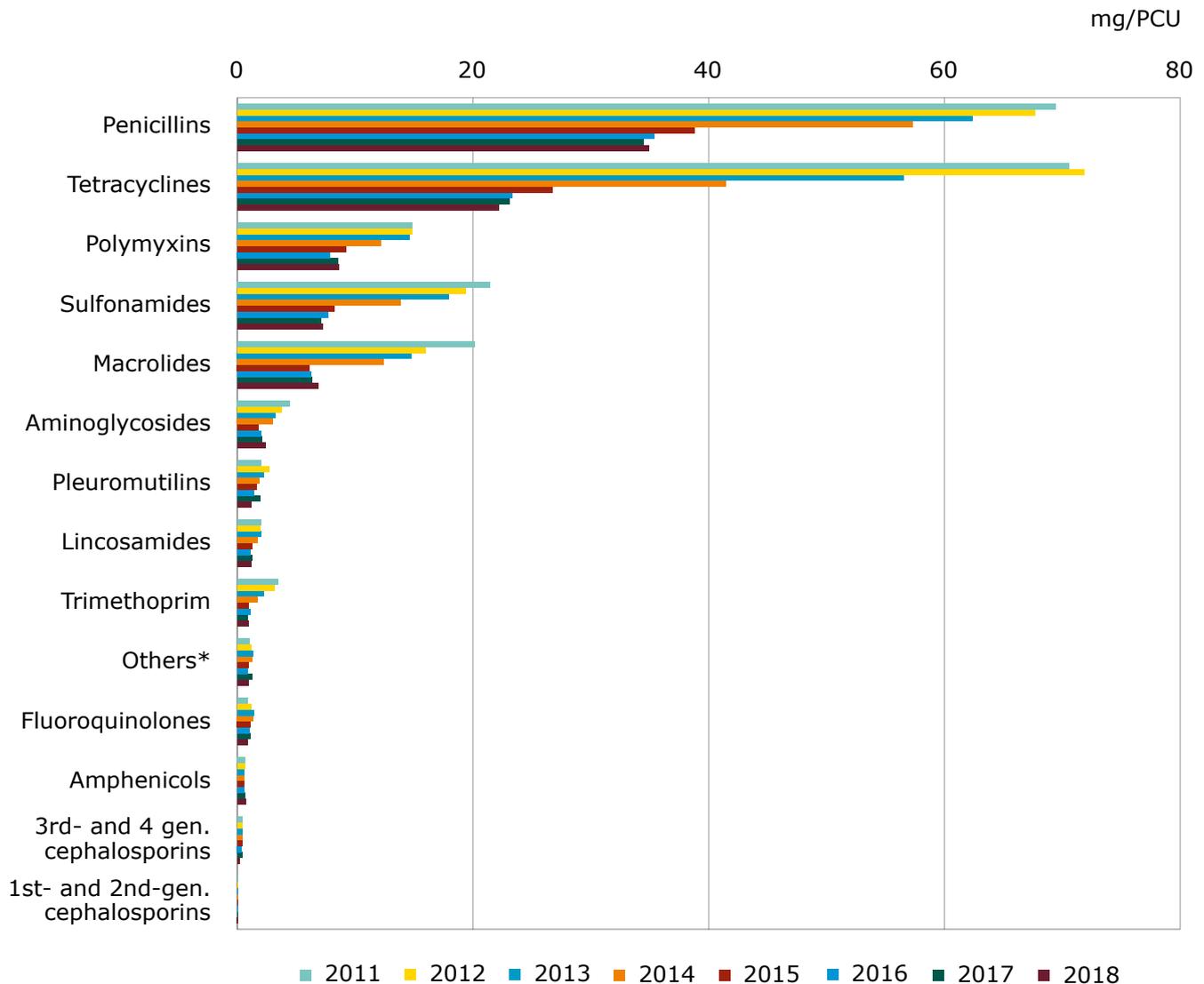


GERMANY



CHANGES IN SALES (MG/PCU) ACROSS YEARS



No sales of other quinolones in any of the years.

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

In Germany, a 58% decrease in the overall sales (mg/PCU) of veterinary antimicrobial agents was observed between 2011 (211.5 mg/PCU) and 2018 (88.4 mg/PCU). The declining trends were observed for nearly all antimicrobial classes, except 1st- and 2nd-generation cephalosporins. The greatest relative reductions were noted for trimethoprim (73%), tetracyclines (69%), sulfonamides (66%), macrolides (66%), penicillins (50%) and 3rd- and 4th-generation cephalosporins (50%). Overall sales (mg/PCU) decreased every year, with the largest fall observed from 2014 to 2015 (34%). The decrease from 2017 (89.0 mg/PCU) to 2018 was 1%.

In 2018, the most-sold classes were penicillins (40%), tetracyclines (25%) and polymyxins (10%), while sales of 1st- and 2nd-generation cephalosporins, 3rd- and 4th-generation cephalosporins and fluoroquinolones, were low, accounting for 0.1%, 0.2% and 1%, respectively, of total annual sales.

Sales, in mg/PCU, of 3rd- and 4th-generation cephalosporins were relatively stable during the period 2011 to 2017, having dropped sharply by 49% from 2017 (0.39 mg/PCU) to 2018 (0.20 mg/PCU). The aggregated sales for 25 countries were 0.18 mg/PCU.

Sales of fluoroquinolones rose by around 50% from 2011 to 2014 but decreased by 35% from 2014 to 2018. In 2011, sales of fluoroquinolones were 0.91 mg/PCU, in 2014, sales were 1.37 mg/PCU and finally in 2018, they were 0.88 mg/PCU, which corresponds to a decrease of 3% in comparison with 2011. The aggregated sales for 25 countries were 2.42 mg/PCU.

For other quinolones, no sales were reported in any of the years.

Sales of polymyxins were 14.84 mg/PCU in 2011 and 8.62 mg/PCU in 2018, a decrease of 42%. From 2016 to 2018, sales increased slightly by 9.3%. The aggregated sales for 25 countries were 3.31 mg/PCU.

The antibiotic-minimising concept in the 16th amendment to the Medicines Act came into force in the second half of 2014. Farms of certain categories and sizes that keep cattle, pigs, chicken or turkeys for fattening purposes must report, inter alia, the number of treated animals and of treatment days for every antimicrobial product administered. Treatment frequencies are calculated for every half year. If the treatment frequency of a single farm is above the median of the farms of a certain category, the farm must evaluate its antimicrobial usage together with a veterinarian. If the frequency of therapy is above the third quartile, a management plan is issued and sent to the supervisory authority. This antibiotic-minimising concept cannot be set in direct numeric relation to the decrease in sales for veterinary antimicrobial agents, but it appears to be having an effect.

In Germany, a fact-finding mission was carried out between 19 and 26 April 2016 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=3676&rep_inspection_ref=xxx

