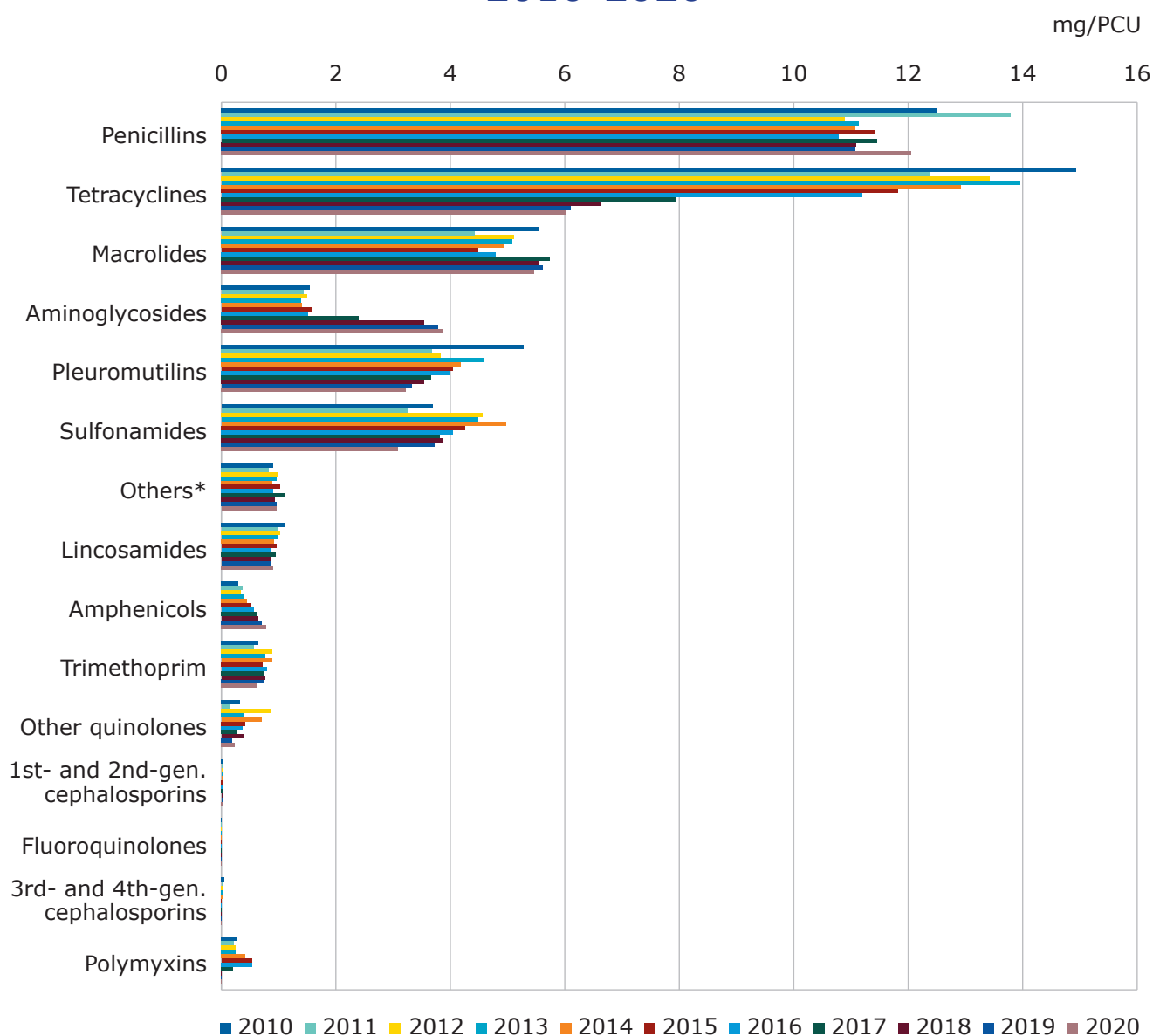




SALES TRENDS (MG/PCU) OF ANTIMICROBIAL VMPs FOR FOOD-PRODUCING ANIMALS

2010-2020



* The class 'Others' includes sales of bacitracin and spectinomycin (classified as 'Other antibacterials' in the ATCvet system).

From 2011 (42.1 mg/PCU) to 2020 (37.2 mg/PCU), overall sales of veterinary antimicrobial agents fell by 11.7% and from 2019 (37.1 mg/PCU) to 2020, they increased by 0.2%.

In 2020, the highest-selling classes of antimicrobial VMPs in Denmark were penicillins (32.4%), tetracyclines (16.2%) and macrolides (14.7%). Beta-lactamase-sensitive penicillins accounted for 56.3% of all penicillin sales. The updated 'Yellow card' initiative for pigs introduced in 2016 multiplies the average daily dose

(ADD) for tetracycline by a factor of 1.5. As a result, tetracycline sales as a proportion of total sales fell from 28.3% in 2015 to 16.2% in 2020.

In 2010 and 2011, 3rd- and 4th-generation cephalosporins accounted for 0.1% of total sales; in 2020, the figure was 0.002%. From 2011 (0.026 mg/PCU) to 2020 (0.0008 mg/PCU), total sales of 3rd- and 4th-generation cephalosporins fell by 96.9%, mainly due to a voluntary 2010 initiative by the pig industry to cease their use. In comparison with 2019 (0.004 mg/PCU), sales in 2020 dropped by 80.8%. Aggregated sales for the 25 countries were 0.16 mg/PCU.

Sales of fluoroquinolones for food-producing animals are generally low in Denmark, accounting for just 0.006% of total sales in 2020. From 2011 (0.006 mg/PCU) to 2020 (0.002 mg/PCU), sales of fluoroquinolones fell by 57.7%. The reason for these rather low figures is a strict regulation on the prescription of fluoroquinolones for food-producing animals, in force since 2002. Aggregated sales for the 25 countries were 2.21 mg/PCU.

For other quinolones, sales in 2020 were 0.23 mg/PCU, accounting for 0.6% of total sales. From 2011 (0.15 mg/PCU) to 2020, sales increased by 54.7%, and from 2019 (0.19 mg/PCU) to 2020, they increased by 21.1%. Aggregated sales for the 25 countries were 0.16 mg/PCU.

Sales of polymyxins for food-producing animals are very low in Denmark, accounting for just 0.0001% of total sales in 2020. Although sales increased from 2014 (0.42 mg/PCU) to 2016 (0.54 mg/PCU) due to increasing use of polymyxins (colistin) in pigs, from 2011 (0.22 mg/PCU) to 2020 (0.00004 mg/PCU) they decreased almost by 100%. The average daily dose (ADD) for polymyxins is multiplied by a factor of 10. Aggregated sales for the 25 countries were 2.58 mg/PCU.

Sales of macrolides accounted for 14.7% of total sales in 2020. From 2011 (4.42 mg/PCU) to 2020 (5.46 mg/PCU), they increased by 23.6%. Approximately 94% of the macrolides sold (mostly tylosin) are used in pigs. Macrolides are used as a substitute for tetracycline, and this class of antimicrobials has been assigned a factor of 1.

The political target for reducing antimicrobial consumption in pigs set in 2018 aimed for an 8% reduction by the end of 2022. Consumption in pigs in 2020 increased by 0.5% compared to 2018.

