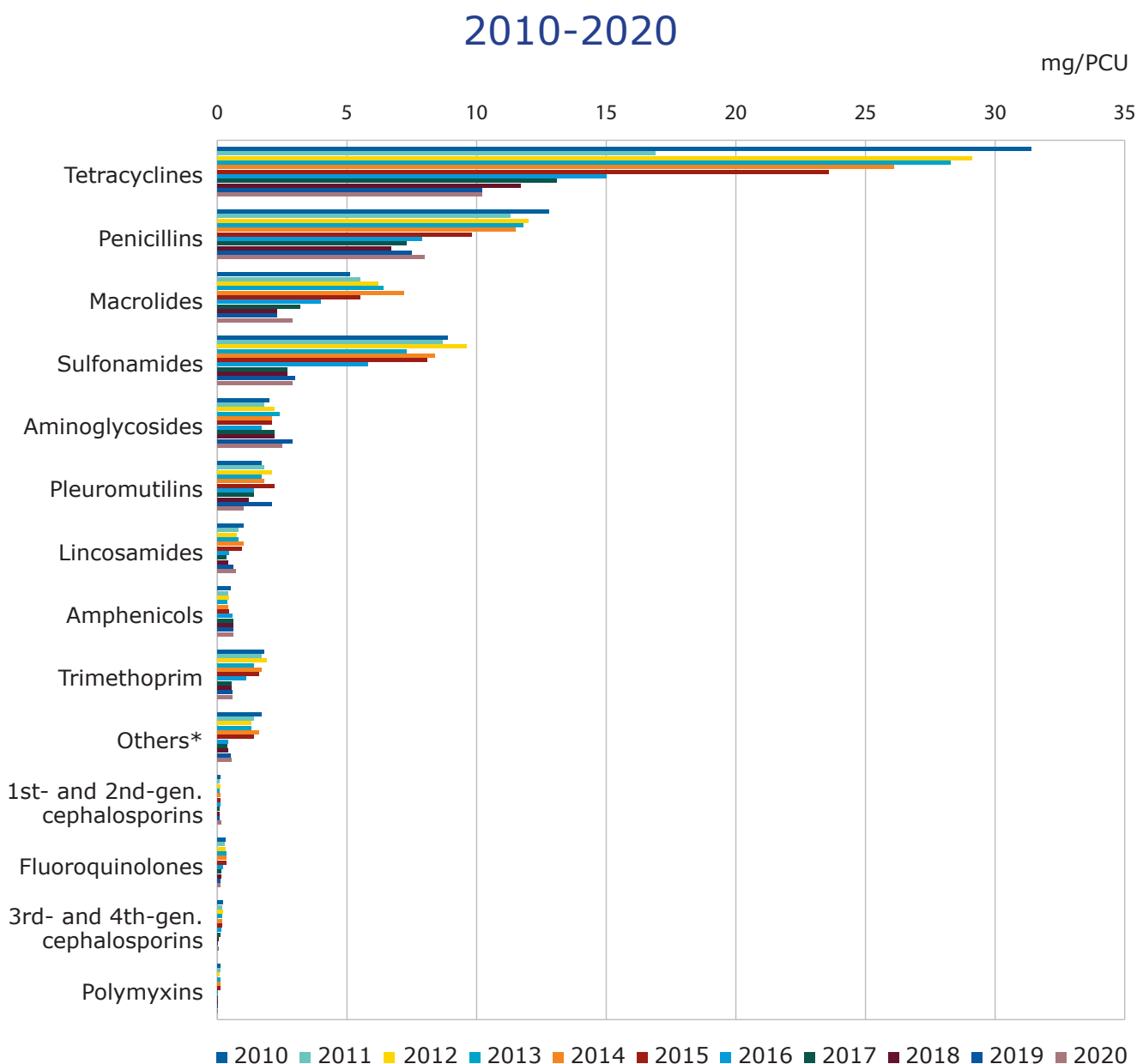




SALES TRENDS (MG/PCU) OF ANTIMICROBIAL VMPs FOR FOOD-PRODUCING ANIMALS



No sales of other quinolones in any of the years.

Sales of certain tetracycline-containing VMPs were high in late 2010. These VMPs were probably used in 2011 and thus their use has been underestimated for 2011.

For several VMPs, historical updates to strengths and pack sizes were implemented in the 2010–2018 data.

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

Overall sales of antibiotics for use in food-producing animal species in 2020 (30.1 mg/PCU) declined by 40.9% when compared to 2011 (51.0 mg/PCU) and by 1.0% when compared to 2019 (30.5 mg/PCU). It is thought that sales of 2011 are artificially low and sales of 2010 are artificially high due to altered product-purchasing behaviour in anticipation of a change in MAHs for certain tetracycline-containing VMPs between 2010 and 2011. However, it should be noted that over the period of 2012 to 2020, a 54.5% decline in sales was observed.

In 2020, the highest-selling classes were tetracyclines (33.8%), penicillins (26.4%), macrolides (9.7%) and sulfonamides (9.6%), while sales of polymyxins, 3rd- and 4th-generation cephalosporins, 1st- and 2nd-generation cephalosporins and fluoroquinolones were very low, accounting for 0.0002%, 0.13%, 0.46% and 0.34% of total sales, respectively. Between 2012 and 2016, there was a decrease in sales of most of the antimicrobial classes, although this was particularly substantial for tetracyclines (48.6%). Despite this reduction, tetracyclines remained the highest-selling class in 2020.

From 2011 (0.17 mg/PCU) to 2020 (0.04 mg/PCU), sales of 3rd- and 4th-generation cephalosporins decreased by 77.9%. From 2019 (0.03 mg/PCU) to 2020, they increased by 0.01 mg/PCU. Sales were relatively stable during the period 2010 to 2016 but dropped significantly from 2016 to 2020. Aggregated sales for the 25 countries were 0.16 mg/PCU.

Sales of fluoroquinolones were also relatively stable between 2010 and 2015 and have been dropping steadily since 2016. From 2011 (0.28 mg/PCU) to 2020 (0.10 mg/PCU), sales of fluoroquinolones fell by 64.1% and from 2019 (0.13 mg/PCU) to 2020 by 0.03 mg/PCU. Aggregated sales for the 25 countries were 2.21 mg/PCU.

The same pattern is observed for sales of polymyxins, which were relatively stable during the period 2010 to 2015, and dropped sharply — by 99.9% — from 2015 (0.12 mg/PCU) to 2020 (0.0001 mg/PCU). From 2019 (0.0002 mg/PCU) to 2020, they dropped by 0.0001 mg/PCU. Aggregated sales for the 25 countries were 2.58 mg/PCU.

Sales of macrolides dropped by 46.8% from 2011 to 2020 but increased by 24.7% from 2019 to 2020.

A programme for the surveillance of antibiotic use continues to be developed in the UK and the UK-VARSS (Veterinary Antimicrobial Resistance and Sales Surveillance) 2020 report¹ includes antibiotic use data from the pig, turkey, broiler, duck, laying hen, gamebird, salmon and trout sectors.

Antibiotic use data in pigs were extracted from the electronic Medicines Book for Pigs (eMB-Pigs) software launched by the Agriculture and Horticulture Development Board for pigs (AHDB Pork) in April 2016. The 2020 data cover >95% of the industry, and show that between 2015 and 2020, using ESVAC PCU weights as the denominator, antibiotic use decreased by 62%, from 278 mg/kg in 2015 to 105 mg/kg in 2020.

The British Poultry Council (BPC) provided data collected from their members, who represent 90% of the commercial poultry meat industry. These data showed that between 2014 and 2020, again using ESVAC PCU weights as the denominator, antibiotic use decreased in the chicken meat sector by 67%, from 48.8 mg/kg to 16.3 mg/kg, and in the turkey sector by 88%, from 219.5 mg/kg to 25.7 mg/kg.

¹ <https://www.gov.uk/government/publications/veterinary-antimicrobial-resistance-and-sales-surveillance-2020>

