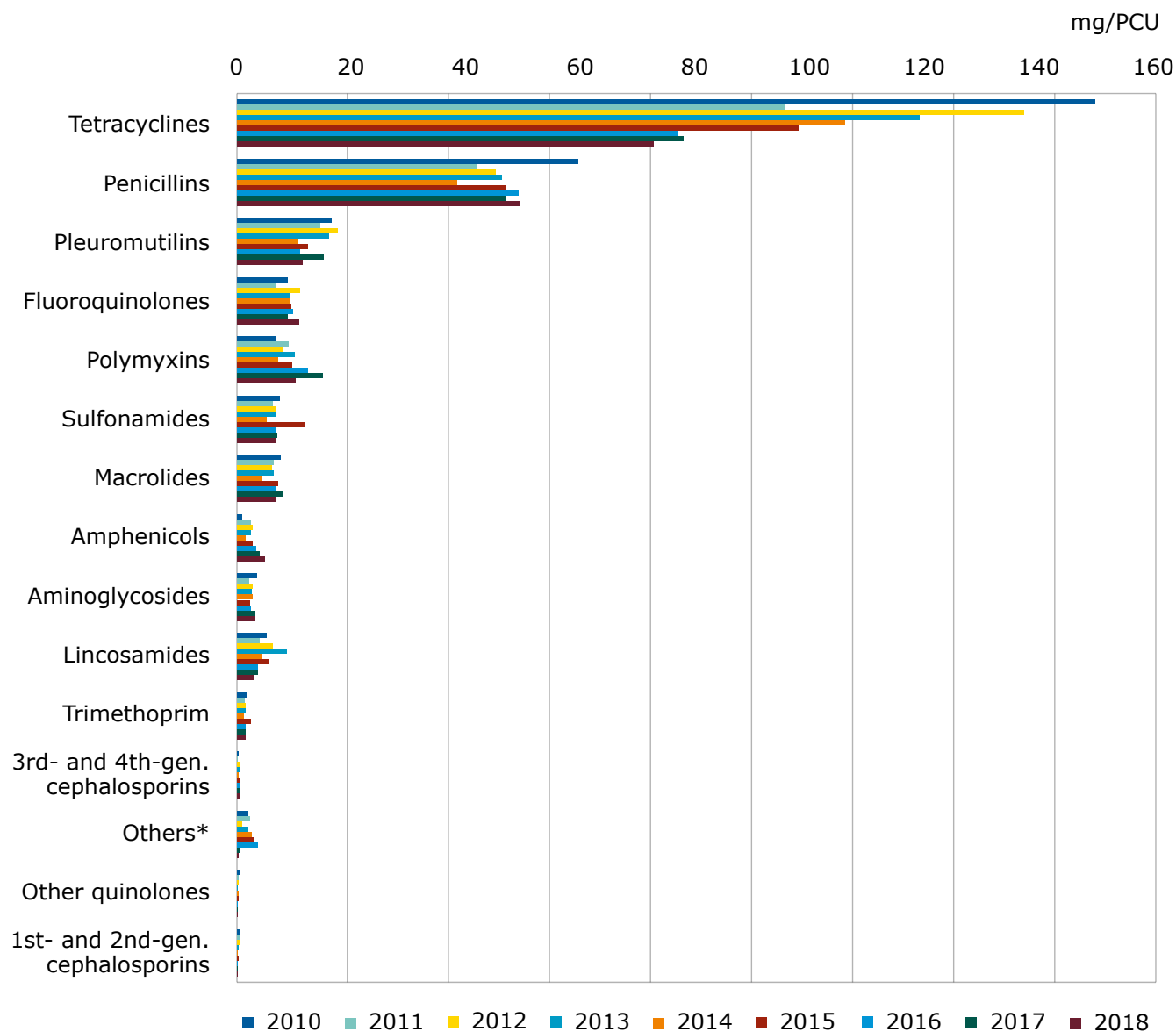


HUNGARY



CHANGES IN SALES (MG/PCU) ACROSS YEARS



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

Total sales (mg/PCU) fluctuated during the period 2010 to 2018. The observed sales were 269.9 mg/PCU, 192.5 mg/PCU, 245.8 mg/PCU, 230.7 mg/PCU, 193.1 mg/PCU, 211.4 mg/PCU, 187.1 mg/PCU, 191.0 mg/PCU and 180.6 mg/PCU, for each year respectively. In 2010, the system for collecting data was different. Wholesalers reported the amounts sold to each other as well, so the 2010 data have probably been overestimated.

From 2011 to 2018, a 6% of total decrease was observed, while from 2017 to 2018, sales decreased by 5%. The most-sold classes across the years were tetracyclines and penicillins. From 2011 to 2018, the sales of tetracycline decreased by 24%, but sales of penicillin increased by 18%.

In 2018, the most-sold classes were tetracyclines (40%) and penicillins (27%), while 1st- and 2nd generation cephalosporins, other quinolones and 3rd- and 4th-generation cephalosporins, represented 0.1%, 0.1% and 0.3%, respectively, of the total annual sales (in mg/PCU).

Sales of 3rd- and 4th-generation cephalosporins show a growing trend, with an increase of 244% from 2011 (0.14 mg/PCU) to 2018 (0.49 mg/PCU) and of 9% from 2017 (0.45 mg/PCU) to 2018. The aggregated sales for 25 countries were 0.18 mg/PCU.

Sales of fluoroquinolones fluctuated during this period, having increased by 60% between 2011 (6.74 mg/PCU) and 2018 (10.81 mg/PCU) and by 22% between 2017 (8.84 mg/PCU) and 2018. Of note is that in 2018, fluoroquinolones accounted for 6% of the total annual sales, being the fourth most-sold class. The aggregated sales for 25 countries were 2.42 mg/PCU.

For other quinolones, sales decreased by 30% from 2011 (0.20 mg/PCU) to 2018 (0.14 mg/PCU) and slightly increased by 12% from 2017 (0.12 mg/PCU) to 2018. The sharpest drop was observed between 2015 and 2016. The aggregated sales for the 25 countries were 0.27 mg/PCU.

Sales of polymyxins also fluctuated, with an increase of 14% from 2011 (8.91 mg/PCU) to 2018 (10.14 mg/PCU), but a decrease of 32% in comparison to 2017 (14.88 mg/PCU). Of note is that in 2018, polymyxins also accounted for 6% of the total annual sales, being the fifth most-sold class. The aggregated sales for 25 countries were 3.31 mg/PCU.

Annual sales of macrolides fluctuated across the years, with a slight increase of 6% from 2011 to 2018, but a decrease of 14% from 2017 to 2018.

A national action plan to reduce the spread of antimicrobial resistance was developed in 2018. In line with this action plan, amendments to national legislation on veterinary medicinal products are currently underway.

