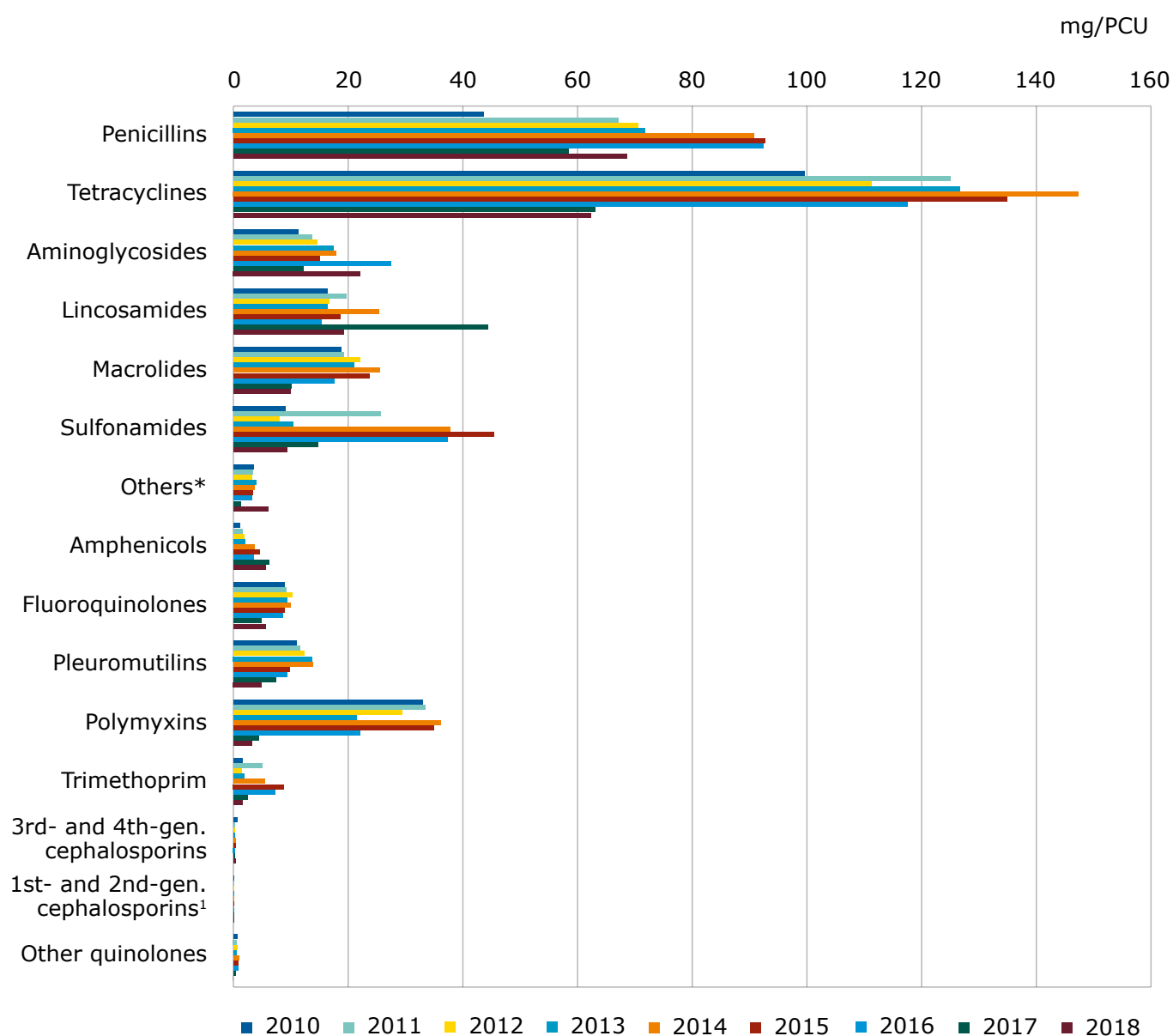


# SPAIN



## CHANGES IN SALES (MG/PCU) ACROSS YEARS



Sales of 1st- and 2nd-generation cephalosporins were low each year (<0.05% of total sales).

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

Datasets for 2010 to 2016 included sales for antimicrobial VMPs declared by MAHs. In 2017 and 2018, data reported include sales by retailers, pharmacies and feed mills, thus representing sales closer to the end users. Thus, data for the period 2010-2016 are not directly comparable with data for 2017-2018 and further observations in trends in sales should be interpreted with these differences in mind.

For the period 2010 to 2018, sales (mg/PCU) and sales patterns in Spain varied. From 2010 to 2014, an overall increase in sales of 61% was observed, while a reduction of 48% can be seen from 2014 to 2018. Spain changed its system for collecting sales data as from 2014. Under-reporting was identified for the years 2010 to 2013, which (among other reasons) means that the data for these years represent underestimates. Therefore, data for 2010-2013 are not directly comparable with data for the years 2014 to 2018.

From 2010 to 2015, a decrease of 45% was observed. This decline is attributed to the adoption of the Spanish National Plan against Antibiotic Resistance<sup>1</sup> in June 2014, recently updated for 2019-2021.

Six strategies were included in this common plan for the veterinary, human and environmental sectors, aimed at promoting appropriate use, ensuring effective surveillance systems, promoting research and innovation, and developing a communication and education plan.

Different activities have been carried out focusing on prudent use of antimicrobials in animals, including a plan to voluntarily reduce the use of antibiotics in all species, mainly those included in AMEG category B. An epidemiological clinical pathogens map has been developed to facilitate the prescription and several training courses have been provided to veterinarians, farmers and general public. These initiatives contributed to the reduction of overall consumption of antimicrobial agents for veterinary use in Spain from 418.8 mg/PCU in 2014 to 219.2 mg/PCU in 2018, which is a reduction of 48%, with a clear change in the trend from 2014 to nowadays.

Sales (mg/PCU) of 3rd- and 4th-generation cephalosporins were stable from 2011 to 2018, with considerably higher sales in 2010 accounting for 0.3% of the total sales, while for 2018 this figure was 0.2%. In 2018, sales of 3rd- and 4th-generation cephalosporin VMPs were 0.40 mg/PCU, while aggregated sales for 25 countries in that year were 0.18 mg/PCU.

Sales of fluoroquinolones were relatively stable from 2010 to 2018. In 2011, sales of fluoroquinolones accounted for 2.7% of total sales, while in 2018, this figure was 2.5%. In 2018, sales of fluoroquinolone VMPs were 5.58 mg/PCU, while aggregated sales for 25 countries in that year were 2.42 mg/PCU.

No sales of other quinolones were reported in 2018, while in 2011, this subclass accounted for 0.60 mg/PCU (0.2% of total sales in that year).

Sales of polymyxins decreased by 26% from 2017 to 2018 and by 91% since 2014. In 2018, sales of polymyxins were 3.26 mg/PCU, while aggregated sales for 25 countries in that year were 3.31 mg/PCU. Activities within the action plan to voluntarily reduce the use of colistin in pigs have likely contributed to the decline in sales of colistin.

In Spain, a fact-finding mission was carried out between 13 and 20 October 2016 in order to gather information on the prudent use of antimicrobials in animals<sup>2</sup>.

<sup>1</sup> <http://www.aemps.gob.es/publicaciones/publica/home.htm>

<sup>2</sup> [https://ec.europa.eu/food/audits-analysis/audit\\_reports/details.cfm?rep\\_id=3832&rep\\_inspection\\_ref=xxx](https://ec.europa.eu/food/audits-analysis/audit_reports/details.cfm?rep_id=3832&rep_inspection_ref=xxx)

