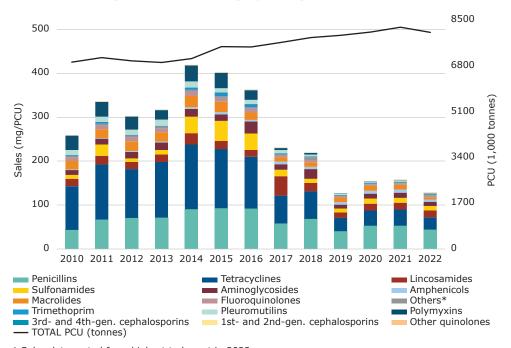
Sales trends (mg/PCU) of antibiotic VMPs for food-producing animals

Sales trends by antibiotic class (mg/PCU) from 2010 to 2022^{1,2,3}

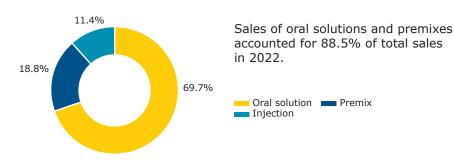


- ¹ Sales data sorted from highest to lowest in 2022.
- ² No sales of other quinolones were reported in 2018, 2019 or 2020.
- ³ From 2010 to 2013, sales are underestimates due to underreporting.
- * The class 'Others' includes sales of bacitracin, rifaximin and spectinomycin (classified as other antibacterials in the ATCvet system).

Since 2011:

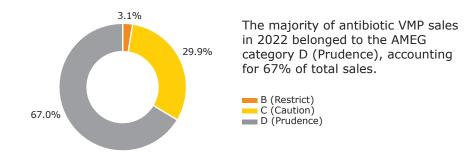
- 62.1% overall annual sales (from 335.8 mg/PCU to 127.4 mg/PCU in 2022)
- ♦ 26.6% 3rd- and 4th-generation cephalosporin sales (from 0.26 mg/PCU to 0.19 mg/PCU in 2022)
- 63.9% fluoroquinolone sales (from 9.2 mg/PCU to 3.3 mg/PCU in 2022)
- 95.9% other quinolone sales (from 0.60 mg/PCU to 0.02 mg/PCU in 2022)
- ♦ 98.9% polymyxin sales (from 33.5 mg/PCU to 0.38 mg/PCU in 2022)
- PCU increased by 13.2% between 2011 and 2022

Proportion of sales (mg/PCU) by product form in 2022^{1,2}



- ¹ No sales of oral powder products in 2022.
- 2 Sales of other forms (intramammary, intrauterine, bolus and oral paste products) are not represented in the figure and accounted for 0.1% of total sales.

Proportion of sales (mg/PCU) by AMEG categories in 2022



2022 sales data

In 2022, overall sales decreased by 19% in comparison to 2021 (from 157.2 mg/PCU to 127.4 mg/PCU). The three highest selling antibiotic classes were penicillins, tetracyclines and lincosamides, which accounted for 34.7%, 22.1% and 12.2% of total sales, respectively.



Country information

Under the European legislative framework and after a year and a half of entry into force of Regulation (EU) 2019/6, some initial changes in the previously established patterns of the antimicrobial volume of sales in Spain have been observed. Hence, during 2022 there was a significant decrease in the consumption of antimicrobial veterinary medicinal products, most noticeable for premixes.

Concerning the use of antimicrobial medicinal products (AMPs), Article 107 of the Regulation defines the obligations of veterinarians in this matter and constitutes an effective legislative tool at national level. AMPs must not be used routinely to compensate for the lack of biosanitary measures on farms or to promote growth or increase yield and, especially, they must not be used for prophylaxis, except in exceptional cases.

Simultaneously, a great effort has been made in the communication, dissemination and awareness campaigns on the AMR situation at national level from the National Plan against Antimicrobial Resistance (PRAN), coordinated by the Spanish Agency of Medicines and Health Products (AEMPS). The changes in the way veterinarians and industry stakeholders work, as required by the Regulation, have been channelled through the members of PRAN, currently made up of all the autonomous communities, 10 ministries (Health, Consumer Affairs, Agriculture, Economy, Education, Science, Universities, Interior, Defence and Ecological Transition), more than 70 scientific societies, professional associations and universities, and around 300 expert collaborators who participate in the development of the plan.

Another line of strategic action was the establishment of individual antibiotic reduction plans per food-producing species¹ (e.g. the colistin/porcine reduction plan), known as 'Programas Reduce', which have been a great success over the years. There are currently 10 of them and they are defined as voluntary reduction programmes for the consumption of certain antibiotics in different species. These antibiotic reduction plans are 3 years long, and new objectives are signed according to the sector's needs.

Other remarkable initiatives led by the Spanish National Plan were the development of Veterinary Therapeutic Prescription Guidelines to promote antimicrobial stewardship, and the creation and implementation of a Spanish Surveillance Network for bacterial pathogens from diseased animals. This activity also enabled setting up an interactive map where veterinary practitioners and other stakeholders are able to see trends and resistance profiles of different pathogens of interest. Moreover, different training activities are provided for veterinarians, farmers and the general public. All the above contribute to an overall reduction in antimicrobial VMP sales in Spain, as observed throughout 12 years of active collaboration in the ESVAC project.

¹ https://www.resistenciaantibioticos.es/es/lineas-de-accion/control/programas-de-reduccion-en-sanidad-animal