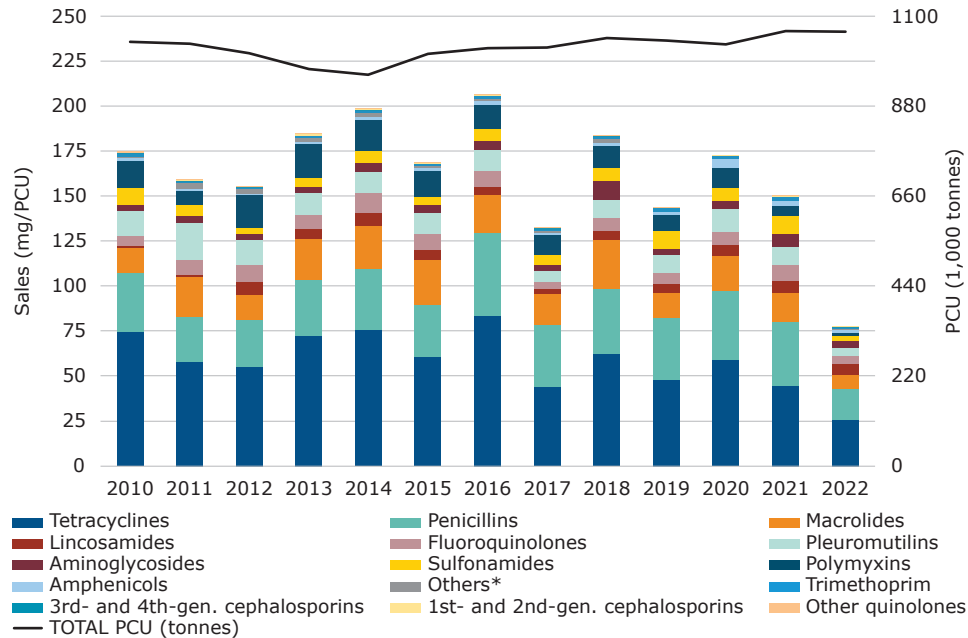




PORTUGAL

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}

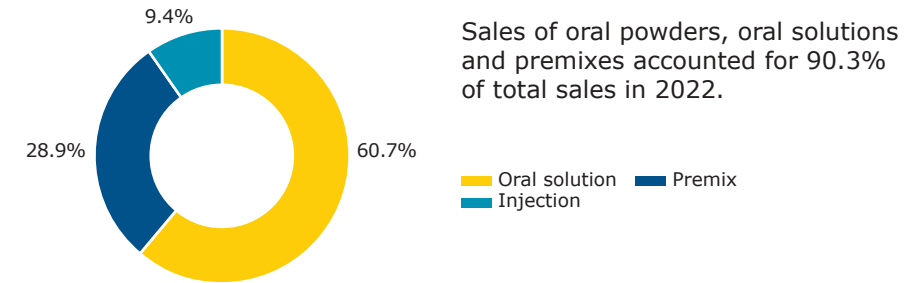


¹ Sales data sorted from highest to lowest in 2022.
² No sales of other quinolones were reported in either 2020 or 2022.
³ Sales in 2010–2014, 2017 and 2019 are underestimates, due to underreporting.
 * The class 'Others' includes sales of the following sub-classes: imidazole derivatives (metronidazole), nitrofurantoin derivatives (furazolidone) and other antibacterials (furaltadone, bacitracin, rifaximin and spectinomycin). Of note is that some of the sales could be for non-food-producing animals.

Since 2011:

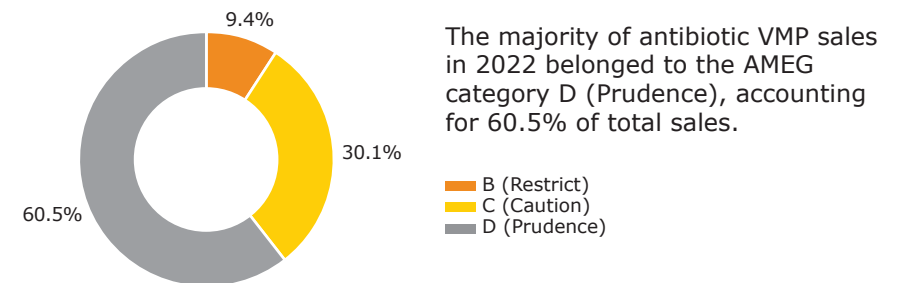
- ⬇️ 51.5% overall annual sales (from 159.2 mg/PCU to 77.1 mg/PCU in 2022)
- ⬇️ 25% 3rd- and 4th-generation cephalosporin sales (from 0.32 mg/PCU to 0.24 mg/PCU in 2022)
- ⬇️ 36.9% fluoroquinolone sales (from 8.2 mg/PCU to 5.2 mg/PCU in 2022)
- ⬇️ 100% other quinolone sales (from 0.45 mg/PCU to 0 mg/PCU in 2022)
- ⬇️ 76.5% polymyxin sales (from 7.8 mg/PCU to 1.8 mg/PCU in 2022)
- ⬆️ PCU increased by 2.8% between 2011 and 2022

Proportion of sales (mg/PCU) by product form in 2022¹



¹ Sales of oral powders and other forms (intramammary, intrauterine, bolus and oral paste products) are not represented in this figure and accounted for 0.6% and 0.3% of total sales, respectively.

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



The majority of antibiotic VMP sales in 2022 belonged to the AMEG category D (Prudence), accounting for 60.5% of total sales.

2022 sales data

In 2022, overall sales decreased by 48.5% in comparison to 2021 (from 149.9 mg/PCU to 77.1 mg/PCU). The three highest selling antibiotic classes were tetracyclines, penicillins and macrolides, which accounted for 33.3%, 22.8% and 9.6% of total sales, respectively.

Country information

In Portugal, overall sales fluctuated over the period of participation in the ESVAC project, showing a peak in 2016 (206.4 mg/PCU) and a trough in 2017 (132.1 mg/PCU). Sales of 2019 are a result of both underreporting and consumption reduction (confirmed by the stakeholders). In 2020, there was an increase in sales, but this was not as big as the data suggest due to the underreporting in 2019.

Due to these issues of underreporting, Portugal developed a new platform for the collection, management and analysis of these data in order to reduce errors in data collection and reporting.

In 2022, sales of antibiotic VMPs almost halved (-48%) compared to those reported in 2021 and are the lowest ever recorded. This substantial reduction is due mainly to lower sales of premixes, which decreased by 73% (from 83 mg/PCU to 22.3 mg/PCU) between 2021 and 2022 and, to a lesser extent, lower sales of oral solutions (17% decrease). Data for 2022 suggests that treatments with premixes haven't been replaced by treatments with other pharmaceutical forms or antibiotic classes (sales decreased for all classes except for 'Others').

Premix sales have always represented a large portion of the annual sales of antibiotic VMPs in Portugal, ranging from 70% in 2011 to 55% in 2021. Changes in the legislation (mainly regarding the rules on the use of premixes), the implementation of electronic prescriptions in January 2022, and workshops and training sessions (for veterinarians and producers) organised by Direção-Geral de Alimentação e Veterinária (DGAV) are all thought to have contributed to the decrease of sales in 2022.

In 2014, the implementation of the National Action Plan for the Reduction of Use of Antibiotics in Animals emphasised the need for a reduction in the use of HP CIAs in human medicine. In 2016, the autonomous regions of Portugal initiated the reporting of antimicrobial VMP sales to support accurate data collection. Since then, the datasets have included sales of antimicrobial VMPs in those regions.

A new strategic national plan under the One Health approach involving the human, veterinary and environment sectors, with an operational plan and measurable objectives based on previous results, was established for 2019–2023¹.

Meanwhile, new initiatives have already been taken, namely voluntary programmes for the reduction of the use of antimicrobials in rabbits and poultry and colistin in pigs.

Since 2010, the national annual reports monitoring the antimicrobial consumption of VMPs approved for use in food-producing and companion animals are publicly available on the Directorate-General for Food and Veterinary website².

¹ <https://www.dgs.pt/documentos-e-publicacoes/plano-nacional-de-combate-a-resistencia-aos-antimicrobianos-2019-2023-pdf.aspx>

² <https://www.dgav.pt/medicamentos/conteudo/medicamentos-veterinarios/planos-de-controlo-oficial-e-relatorios/esvac/>