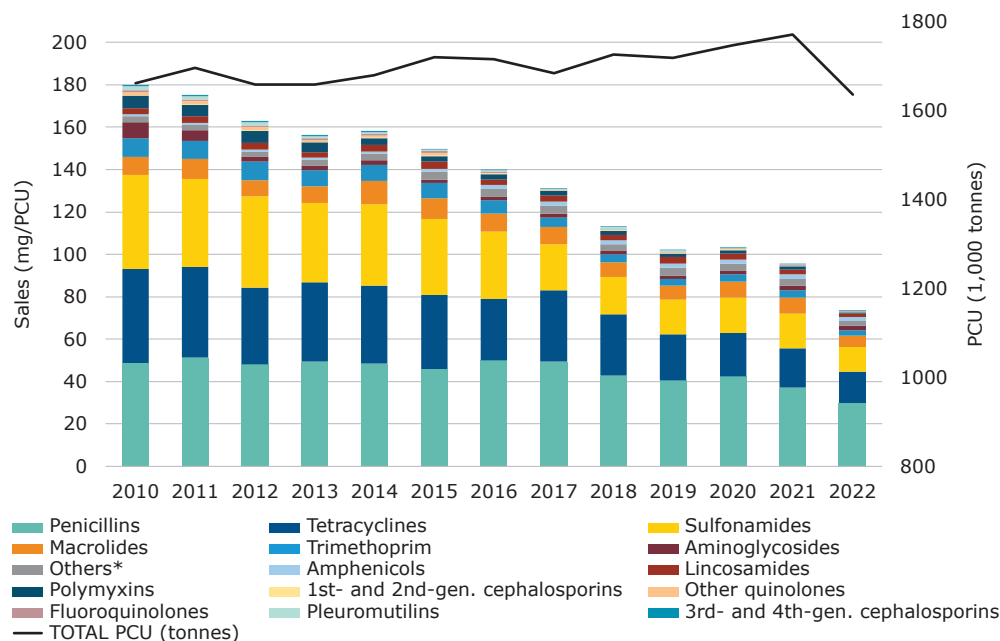


Sales trends (mg/PCU) of antibiotic VMPs for food-producing animals

Sales trends by antibiotic class (mg/PCU) from 2010 to 2022¹



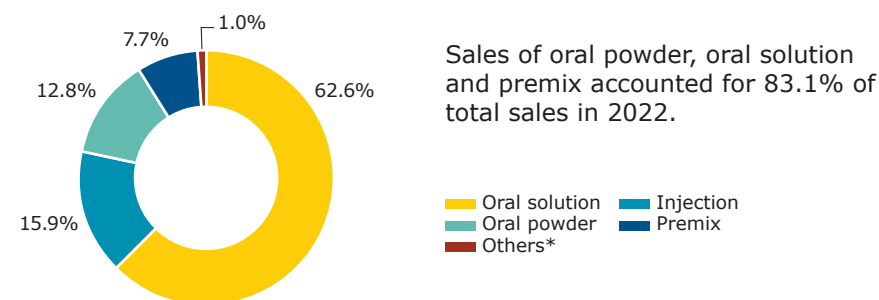
¹ Sales data sorted from highest to lowest in 2022.

* The class 'Others' includes sales of bacitracin, rifaximin and spectinomycin (classified as other antibacterials in the ATCvet system).

Since 2011:

- ↓ 58.0% overall annual sales (from 175.1 mg/PCU to 73.5 mg/PCU in 2022)
- ↓ 84.8% 3rd- and 4th-generation cephalosporins sales (from 0.50 mg/PCU to 0.08 mg/PCU in 2022)
- ↓ 78.3% fluoroquinolones sales (from 0.79 mg/PCU to 0.17 mg/PCU in 2022)
- ↓ 84.9% other quinolones sales (from 1.6 mg/PCU to 0.24 mg/PCU in 2022)
- ↓ 88.1% polymyxins sales (from 5.4 mg/PCU to 0.64 mg/PCU in 2022)
- ↓ PCU decreased by 3.6% between 2011 and 2022

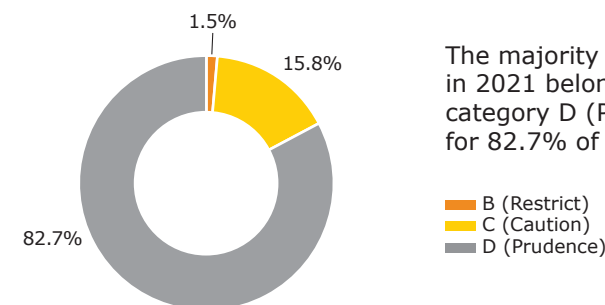
Proportion of sales (mg/PCU) by product form in 2022



Sales of oral powder, oral solution and premix accounted for 83.1% of total sales in 2022.

* Other forms include intramammary, intrauterine, bolus and oral paste products.

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



The majority of antibiotic VMP sales in 2021 belonged to the AMEG category D (Prudence), accounting for 82.7% of total sales.

2022 sales data

In 2022, overall sales decreased by 22.8% in comparison to 2021 (from 95.3 mg/PCU to 73.5 mg/PCU). The three highest selling antimicrobial classes were penicillins, tetracyclines and sulfonamides, which accounted for 40.8%, 20.0% and 15.9% of total sales, respectively.

Country information

In Belgium, awareness campaigns on antibiotic use and the emergence of resistance are primarily based on the results of the national monitoring programme 'BelVet-Sac'¹, which includes data on sales and on the use (in pigs, veal calves, laying hens and broilers) of veterinary antimicrobial VMPs. For this, the Federal Agency for Medicines and Health Products (FAMHP) collaborates with the Faculty of Veterinary Medicine in Ghent and the Centre of Expertise on Antimicrobial Consumption and Resistance in Animals (AMCRA) to collect and analyse data.

In 2021, a 4-year national action plan on Antimicrobial Resistance (AMR) was validated². The aim of this action plan is to coordinate all AMR-related actions at the level of human medicines, veterinary medicines and the environment. In the framework of this national action plan, additional legal measures have been implemented and the data collection system to measure use at farm level will be extended to other target species. Also in 2021, the renewed Covenant on the responsible use of antibiotics in animals was signed by the competent authorities, AMCRA and partners from all sectors, which sets additional strategic and operational objectives for all parties involved. As in previous years, awareness-raising initiatives (by AMCRA), enforcement activities by the competent authority regarding (new) legislation and the preparation of individual analysis reports (benchmarking of both veterinarians and farmers) remain the cornerstones of the national AMR policy.

Due to a collective effort, great progress was made in further reducing sales and use of antimicrobials in veterinary medicine in 2022, especially since a decrease of 7.6% in PCU was recorded. The reduction in sales is mainly due to a significant decrease in oral powders, oral solutions and premixes. Next to an actual reduced use of antimicrobials, 2 more factors might play a role in this result: 1) in 2021, a larger gap between sales and use data was observed, which could suggest a stockpiling effect, followed by a decrease in sales in 2022; and 2) with the entry into force of Regulation 2019/6, it is clear that the extension to other animal categories of the use data collection, as well as capturing sales data at the level

of the veterinarian (as opposed to the distributors and feed mills) will give more insights into the sales and use patterns at national level. To do so and to fulfil the requirements laid out in Regulation 2019/6 and its delegated and implementing acts, a new data collection system is under development with support from the European Commission (SMP-FOOD-2022-AMRtool-AG-IBA grant).

With regards to antimicrobials of critical importance, the sales of polymyxins (consisting almost entirely of colistin sulfate) further decreased substantially despite the recent phasing out of ZnO as an alternative for colistin in the treatment of post-weaning diarrhoea in piglets. The year 2022 was the first year in which no use of ZnO was also registered in the national use data collection tool Sanitel-Med. Sales of fluoroquinolones and cephalosporins decreased slightly, though a slight increase in flumequine sales was observed, which is reflected in a significant increase in its use (data not shown in this report).

Overall, the analysis of the antibiotic sales and usage data in 2022 in Belgium shows positive results, with several national targets met or within reach. Sustained efforts and adjustments to the data collection, including an expansion of the data collected, will be important in order to be able to take the necessary steps in the coming years to further reduce and refine the use of antibiotics in animals.

Since August 2023, new legal requirements came into force, including obligatory sampling and sensitivity testing before using critically important antimicrobials, not only in food-producing animals but now also in non-food producing animals.

¹ https://www.fagg-afmps.be/nl/DIERGENEESKUNDIG_gebruik/geneesmiddelen/geneesmiddelen/goed_gebruik/Antibiotica_0

² <https://www.health.belgium.be/en/combating-antimicrobial-resistance-amr>