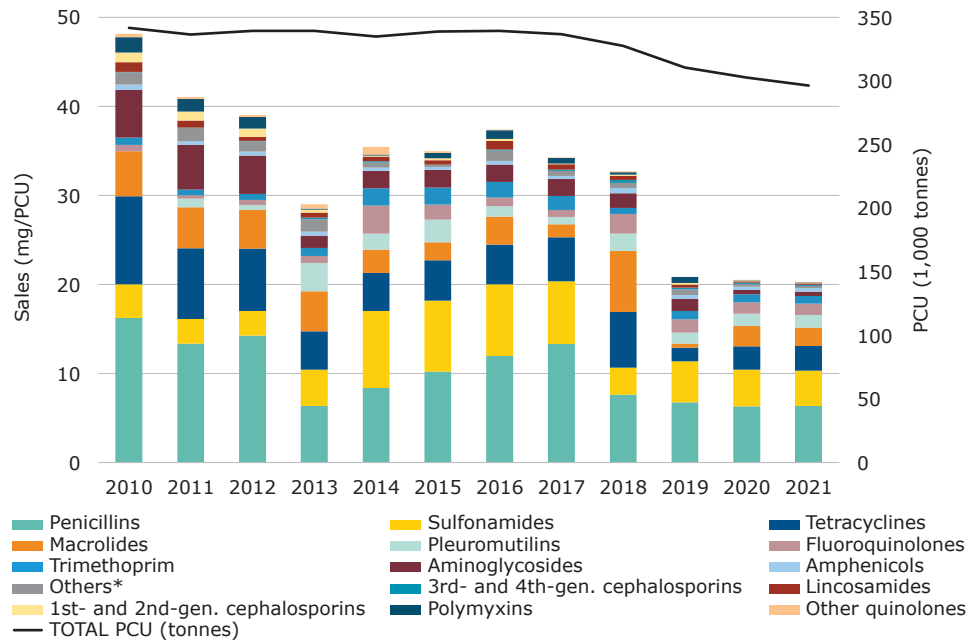


Sales trends by antibiotic class (mg/PCU) from 2010 to 2021¹



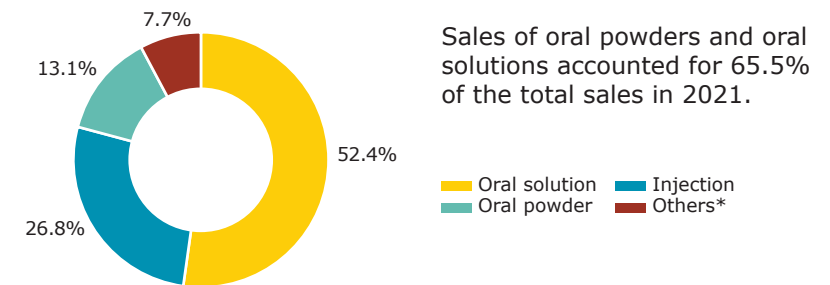
¹ Sales data sorted from highest to lowest in 2021.

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

Since 2011:

- ⬇️ 50.7% overall annual sales (from 41.1 mg/PCU to 20.3 mg/PCU in 2021)
- ⬆️ 249.8% 3rd- and 4th-generation cephalosporin sales (from 0.04 mg/PCU to 0.14 mg/PCU in 2021)
- ⬆️ 224.6% fluoroquinolone sales (from 0.39 mg/PCU to 1.3 mg/PCU in 2021)
- ⬇️ 100% other quinolone sales (from 0.21 mg/PCU to 0 mg/PCU since 2019)
- ⬇️ 100% polymyxin sales (from 1.4 mg/PCU to <0.01 mg/PCU in 2021)
- ⬇️ The PCU decreased by 11.9% between 2011 and 2021

Proportion of sales (mg/PCU) by product form in 2021¹

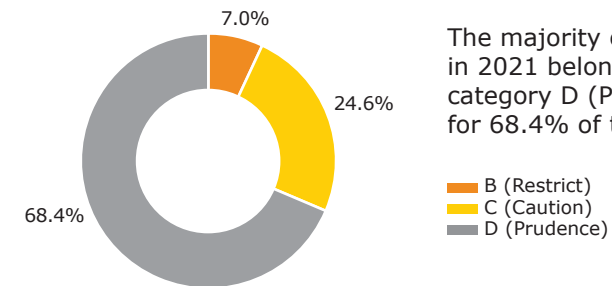


Sales of oral powders and oral solutions accounted for 65.5% of the total sales in 2021.

¹ No sales of pre-mix and oral paste products in 2021.

* Other forms include intramammary, intrauterine and bolus products.

Proportion of sales (mg/PCU) by AMEG categories in 2021



The majority of antibiotic VMP sales in 2021 belonged to the AMEG category D (Prudence), accounting for 68.4% of the total sales.

2021 sales data

In 2021, overall sales decreased by 1.1% in comparison to 2020 (from 20.5 mg/PCU to 20.3 mg/PCU). The three highest selling antibiotic classes were penicillins, sulfonamides and tetracyclines, which accounted for 31.4%, 19.7% and 13.7% of total sales, respectively.



Country information

The State Food and Veterinary Service (SFVS), together with the Ministry of Health, developed a national action plan against antimicrobial resistance for 2017–2020. Moreover, SFVS adopted its own 2015–2020 action plan against antimicrobial resistance in the veterinary and agricultural sectors. From 2020, the action plan against antimicrobial resistance in the veterinary and agricultural sectors is updated annually. Key elements of the antimicrobial resistance action plan are prudent use of antibiotics in animals; restricting off-label use; reducing overall sales of antibiotics for use in animals; and organising training for veterinarians, farmers, animal owners and feed manufacturers on the prudent use of antimicrobial agents in animals.

In addition, a new method for sales data collection was implemented in 2021 by using the national electronic veterinary prescription system (veterinary medicinal products accounting information system).

Moreover, SFVS annually implement the monitoring of antimicrobial resistance in zoonotic and commensal bacteria in certain food-producing animal populations and food (2014–2020 in accordance with 2013/652/EU, and from 2021 in accordance with the European Commission implementing decisions (EU) 2020/1729).