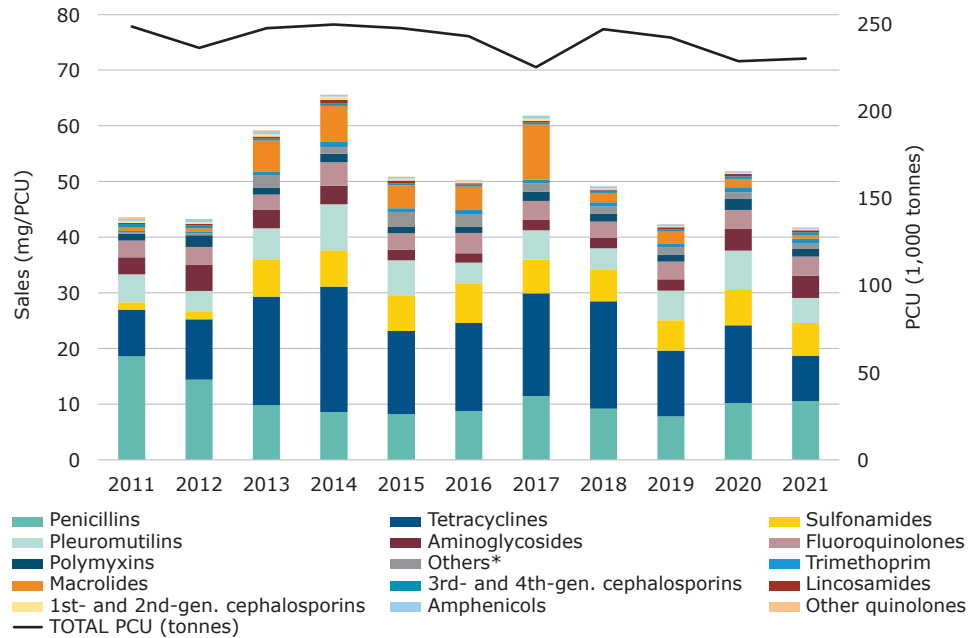




## Sales trends (mg/PCU) of antibiotic VMPs for food-producing animals

### Sales trends by antibiotic class (mg/PCU) from 2011 to 2021<sup>1,2</sup>



<sup>1</sup> Sales data sorted from highest to lowest in 2021.

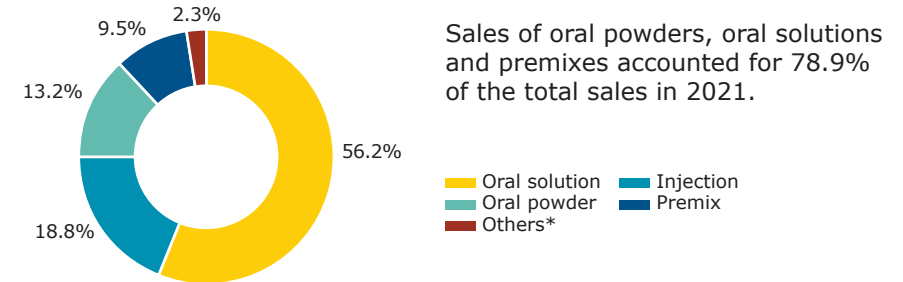
<sup>2</sup> No sales of other quinolones in 2012.

\* The class 'Others' includes sales of the following sub-classes: imidazole derivatives (metronidazole), and other antibacterials (novobiocin, rifaximin and spectinomycin). Of note is that some of the sales could be for non-food-producing animals.

### Since 2011:

- ⬇️ 4.4% overall annual sales (from 43.6 mg/PCU to 41.7 mg/PCU in 2021)
- ⬇️ 22.1% 3rd- and 4th-generation cephalosporin sales (from 0.65 mg/PCU to 0.51 mg/PCU in 2021)
- ⬆️ 14.2% fluoroquinolone sales (from 3.0 mg/PCU to 3.4 mg/PCU in 2021)
- ⬇️ 96.5% other quinolone sales (from 0.33 mg/PCU to 0.01 mg/PCU in 2021)
- ⬆️ 12.2% polymyxin sales (from 1.2 mg/PCU to 1.4 mg/PCU in 2021)
- ⬇️ The PCU decreased by 7.4% between 2011 and 2021

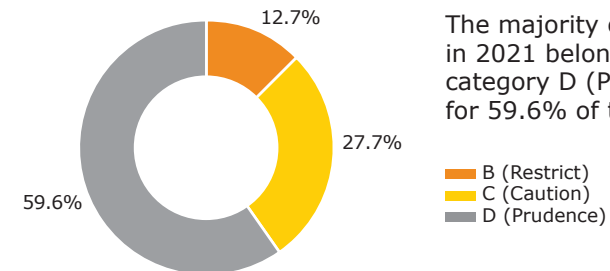
### Proportion of sales (mg/PCU) by product form in 2021



Sales of oral powders, oral solutions and premixes accounted for 78.9% of the total sales in 2021.

\* Other forms include intramammary, intrauterine, bolus and oral paste 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 59.6% of the total sales.

### 2021 sales data

In 2021, overall sales decreased by 19.6% in comparison to 2020 (from 51.9 mg/PCU to 41.7 mg/PCU). The three highest selling antibiotic classes were penicillins, tetracyclines and sulfonamides, which accounted for 25.3%, 19.6% and 14.0% of total sales, respectively.



## Country information

Datasets for 2011 and 2012 only included data for antimicrobial VMPs imported by wholesalers; sales of antimicrobial VMPs to end-users by national manufacturers were therefore not accounted for. Since 2013, wholesalers have also dispensed antimicrobial VMPs produced by national manufacturers. For the years 2013 to 2021, the data include sales from wholesalers to other wholesalers and to end-users (pharmacies, military forces, the State Veterinary and Food Administration, veterinarians, farmers and feed mills), covering both import data and antimicrobial VMPs produced by national manufacturers. This

difference in coverage is thought to be the main reason for differences in sales between the periods 2011–2012 and 2013–2021. Data for the period 2011–2012 are not comparable with data for 2013–2021. Although overall sales fluctuated during the period 2013–2021, sales in 2021 were 30% lower than in 2013. Slovak manufacturers of VMPs, including premixes, mainly produce products with tetracyclines, penicillins, sulfonamides and pleuromutillins — which were the highest-selling classes in 2021 — and with fluoroquinolones.