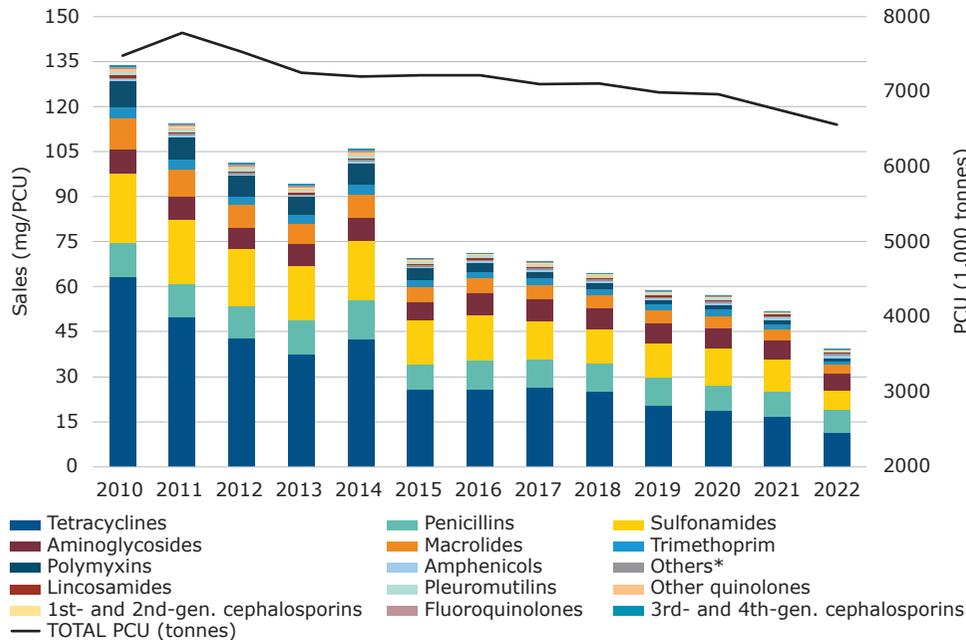


Sales trends (mg/PCU) of antibiotic VMPs for food-producing animals

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



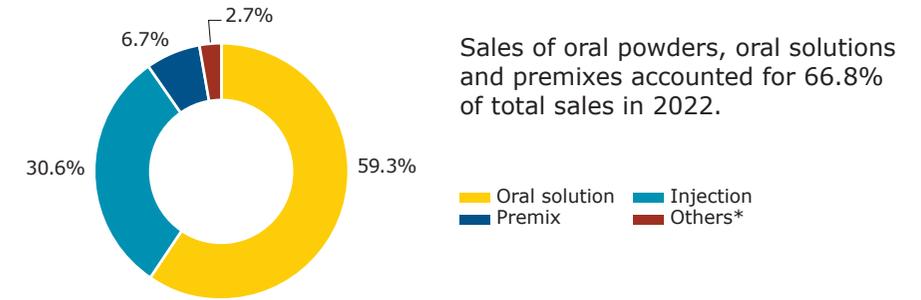
¹ Sales data sorted from highest to lowest in 2022.

* The class 'Others' includes sales of imidazole derivatives (metronidazole) and other antibacterials – classified as such in the ATCvet system (bacitracin, rifaximin and spectinomycin). Of note is that some of the sales could be for non-food-producing animals.

Since 2011:

- ⬇️ 66.0% overall annual sales (from 114.3 mg/PCU to 38.9 mg/PCU in 2022)
- ⬇️ 94.6% 3rd- and 4th-generation cephalosporin sales (from 0.30 mg/PCU to 0.02 mg/PCU in 2022)
- ⬇️ 84.6% fluoroquinolone sales (from 0.62 mg/PCU to 0.10 mg/PCU in 2022)
- ⬇️ 73.2% other quinolone sales (from 0.80 mg/PCU to 0.21 mg/PCU in 2022)
- ⬇️ 85.5% polymyxin sales (from 7.7 mg/PCU to 1.1 mg/PCU in 2022)
- ⬇️ PCU decreased by 15.7% between 2011 and 2022

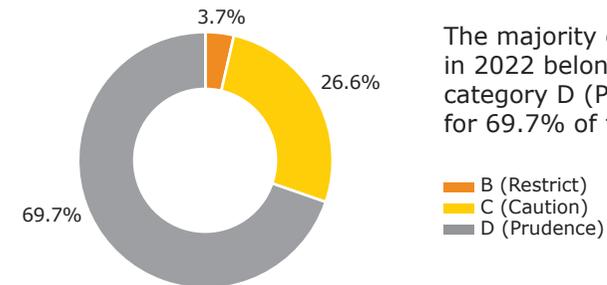
Proportion of sales (mg/PCU) by product form in 2022¹



Sales of oral powders, oral solutions and premixes accounted for 66.8% of total sales in 2022.

¹ Sales of oral powders are not represented in the figure and account for 0.7% of total sales.
* 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 2022 belonged to the AMEG category D (Prudence), accounting for 69.7% of total sales.

2022 sales data

In 2022, overall sales decreased by 24.8% in comparison to 2021 (from 51.7 mg/PCU to 38.9 mg/PCU). The three highest selling antibiotic classes were tetracyclines, penicillins and sulfonamides, which accounted for 29.4%, 19.1% and 16.9% of total sales, respectively.

Country information

The large decrease in antimicrobials used in animals in France is the result of collective action by all stakeholders. The decrease began with the implementation of the 2012–2016 French Action Plan 'EcoAntibio'. During the period covered by the plan, overall exposure to antimicrobials had to decrease¹ by 25% (2011 as the reference year) but the plan's target has been exceeded with a reduction of 38% of the sales. The second action plan, 'EcoAntibio2', which covers the 2017–2022 period, aimed to maintain the good results obtained previously. Between 2017 and 2022, sales of antimicrobials continued to decrease and compared with 2011, overall sales of antimicrobials in veterinary medicine have decreased by 66%.

Specific measures have been undertaken for critically important antimicrobials through a decree published in 2013 that limits the use of 3rd- and 4th-generation cephalosporins and fluoroquinolones. Antimicrobial susceptibility testing is mandatory for veterinarians before using 3rd- and 4th-generation cephalosporins and fluoroquinolones. Between 2013 and 2022, sales of 3rd- and 4th-generation cephalosporins decreased by 95% and sales of fluoroquinolones decreased by 84%.

EcoAntibio2 set the goal of a 50% reduction in exposure to colistin in the cattle, pig and poultry sectors over 5 years compared with 2014. Between 2014 and 2022, sales of polymyxins decreased by 84%.

Between 2021 and 2022, sales of antimicrobials VMPs decreased by 25%. The main decreases are observed for sulfonamides (-31%) and tetracyclines (-38%). In 2021, premixes accounted for 28.0% of the total sales in France, whereas in 2022 premix sales accounted for 6.7%. The two main classes used in premixes are tetracyclines and sulfonamides. The Regulation (EU) 2019/4 on the manufacture, placing on the market and use of medicated feed, strengthens the frameworks for prescribing premixes containing antimicrobials: the use for prophylaxis is no longer possible, and the use for metaphylaxis is limited (the prescription should be limited to a single premix containing antimicrobials). The entry into force of this Regulation in January 2022 had an important impact on the sales of antimicrobials in France. The treatments with premixes haven't been replaced by treatments with other pharmaceutical forms or antimicrobial classes (with no noticeable increase in sales of other forms of antimicrobials).

Various factors have contributed to the reductions in exposure observed since the start of the first EcoAntibio plan. These positive results reflect the mobilisation of the various players in animal sectors and a change in animal treatment practices.

¹ All percentages are calculated for the sales expressed in mg/PCU.