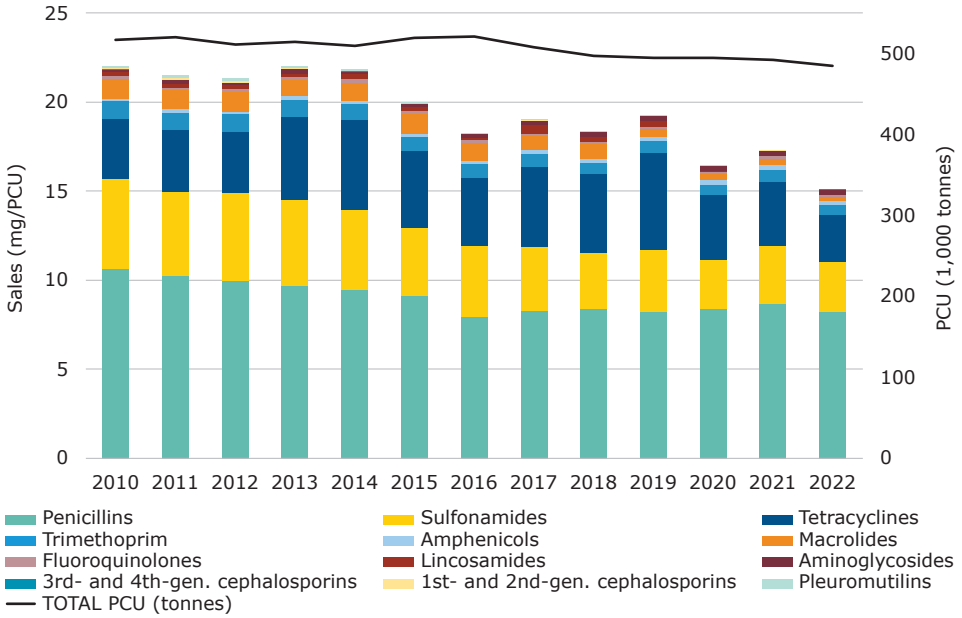
FINLAND

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

Sales trends by antibiotic class (mg/PCU) from 2010 to 2022[1,2]

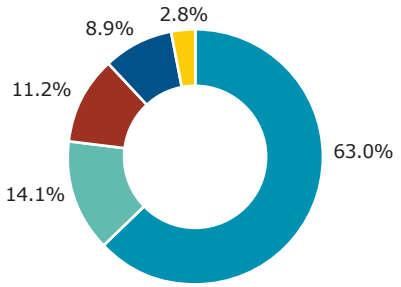


[1] Sales data sorted from highest to lowest in 2022.
[2] No sales of other quinolones, polymyxins and 'Others' (classified as such in the ATCvet system) in any of the years.

Since 2011:

- 30.4% overall annual sales (from 21.3 mg/PCU to 14.9 mg/PCU in 2022)
- 98.1% 3rd- and 4th-generation cephalosporins sales (from 0.02 mg/PCU to <0.01 mg/PCU in 2022)
- 40.3% quinolones sales (from 0.16 mg/PCU to 0.10 mg/PCU in 2022)
- 100% of all quinolones sales for this period were of fluoroquinolones
- No sales of polymyxins in any of the years
- PCU decreased by 6.8% between 2011 and 2022

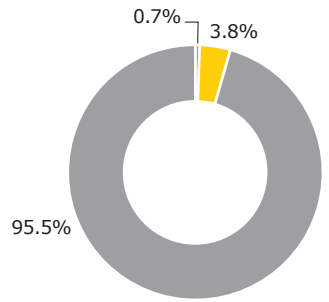
Proportion of sales (mg/PCU) by product form in 2022[1]



Sales of antimicrobials intended for treatment of individual animals (injectable, intramammary and oral paste products) accounted for 74.2% of the total sales in 2022, whereas the remaining 25.8% were products intended for group treatment (oral powders, oral solutions and premixes).

[1] No sales of intrauterine and bolus products in 2022.
* Other forms include intramammary and oral paste products.

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



The majority of antibiotic VMPs sales in 2022 belonged to the AMEG category D (Prudence), accounting for 95.5% of total sales.

2022 sales data

In 2022, overall sales decreased by 12.8% compared to 2021 (from 17.0 mg/PCU to 14.9 mg/PCU). The three highest selling antibiotic classes were penicillins, sulfonamides and tetracyclines, which accounted for 55.0%, 19.2% and 17.7% of total sales, respectively.

Country information

Sales of antibiotics for the treatment of food-producing animals in Finland may be described as modest and prudent. Modest because the sales in 2022, 14.9 mg/PCU, were the lowest ever recorded, and prudent because 95% of sales in 2022 consisted of first-line antibiotics as recommended by the AMEG. Penicillins account for the majority of overall sales (55%) by far, with the narrow spectrum beta-lactamase-sensitive penicillins accounting for 93% of all penicillin sales. Almost 75% of the overall sales in Finland corresponded to product forms mainly intended for the treatment of individual animals, and only the remaining quarter to products administered via feed or drinking water for the treatment of groups of animals.

The proportion of antibiotics classified as critically important in human medicine (AMEG category B 'Restrict') was lower than 1%. Sales of AMEG category B antibiotics available in Finland – i.e. sales of 3rd-generation cephalosporins and fluoroquinolones – continue to be low and have decreased since 2011 by 98% and 40%, respectively. Polymyxins have never been used in food-producing animals in Finland and, as for other quinolones, no sales were reported in any of the years under consideration. Finland is a small market area and severe disruptions in the availability of basic antibiotics are not uncommon. Use is greatly affected by availability issues and fluctuations in sales on a yearly basis must be interpreted with this in mind.

For decades, the key policy objective in Finland has been to reduce the need for antibiotic treatment in animals by eradicating animal diseases, using biosecurity measures and efficient herd health programmes to achieve good animal health. If antibiotics are needed, they should be used prudently, in accordance with the national prudent use guidelines. Old narrow spectrum antibiotics for the individual patient is at the heart of these principles. An overview of the strategic actions implemented since 1949 is available on the Finnish Food Authority website[1].

As a result of comprehensive and efficient control policies, the overall resistance situation in Finland is favourable, as shown by bacteria isolated from animals and food of animal origin and described in the Finnish Veterinary Antimicrobial Resistance Monitoring and Consumption of Antimicrobial Agents reports (FINRES-Vet, published since 1999[2]).

[1] Milestones in prudent use of antimicrobials in animals in Finland: https://ruokavirasto.fi/en/amr/milestones
[2] FINRES-vet reports: https://ruokavirasto.fi/en/amr/monitoring/finres-vet